

# Contemporary Psychology

A JOURNAL OF REVIEWS

October 1968

VOLUME III • NUMBER 10

- Page 289    **The Psychology of Religion**, by W. H. Clark  
*Reviewed by J. E. DERRY*
- 291    **Multivariate Correlational Analysis**, by P. H. DuBois  
*Reviewed by R. P. ABELSON*
- 293    **Motivation and Market Behavior**, by Robert Ferber and  
H. G. Waks (Eds.)  
**Motivation in Advertising: Motives that Make People  
Buy**, by Pierre Martineau  
**Motivation Research and Marketing Management**, by  
J. W. Newman  
*Reviewed by R. A. BAUER*
- 295    **ESP and Personality Patterns**, by Gertrude R. Schneider  
and R. A. McConnell  
**Parapsychology: Frontier Science of the Mind**, by J. B.  
Rhine and J. G. Pratt  
**Beyond the Five Senses: An Anthology from TO-  
MORROW**, by Eileen J. Garrett (Ed.)  
*Reviewed by MICHAEL SCRIVEN*
- 297    **CP SPEAKS**  
By the Editor
- 299    **CP's Role in the Reviewing of Psychological Books**, by  
Edith L. Annin

(Continued on inside cover)

Published by THE AMERICAN PSYCHOLOGICAL ASSOCIATION

Edwin G. Boring, Editor  
Harvard University

EDITH L. ANNIN, Assistant to the Editor

ADOLPH MANOIL, Film Editor  
Park College

#### Editorial Consultants

FRANK A. BEACH, *University of California*

PETER A. BERTOCCHI, *Boston University*

JUDSON S. BROWN, *State University of Iowa*

ROGER W. BROWN, *Massachusetts Institute of Technology*

CLAUDE E. BUXTON, *Yale University*

JACK W. DUNLAP, *Stamford, Conn.*

RICHARD M. ELLIOTT, *University of Minnesota*

ANN M. GARNER, *Lincoln, Neb.*

FRANK A. GELDARD, *University of Virginia*

DANIEL KATZ, *University of Michigan*

DONALD W. MACKINNON, *University of California*

MELVIN H. MARX, *University of Missouri*

DOUGLAS MCGREGOR, *Massachusetts Institute of Technology*

QUINN MCNEMAR, *Stanford University*

CLIFFORD T. MORGAN, *The Johns Hopkins University*

NORMAN L. MUNN, *Bowdoin College*

CHARLES E. OSGOOD, *University of Illinois*

FILLMORE H. SANFORD, *University of Texas*

NEVITT SANFORD, *University of California*

ROBERT R. SEARS, *Stanford University*

HAROLD SEASHORE, *New York, N. Y.*

S. SMITH STEVENS, *Harvard University*

DONALD E. SUPER, *Teachers College, Columbia University*

GEORGE G. THOMPSON, *Syracuse University*

BENTON J. UNDERWOOD, *Northwestern University*

S. RAINS WALLACE, JR., *Hartford, Conn.*

ROBERT I. WATSON, *Northwestern University*

ROBERT W. WHITE, *Harvard University*

Arthur C. Hoffman, Managing Editor

HELEN ORR, Promotion Manager

#### CONTENTS—continued

- 306 **Backwardness in Reading: A Study of its Nature and Origin**, by M. D. Vernon  
**Remedial Reading: Teaching and Treatment**, by M. D. Woolf and Jeanne A. Woolf  
*Reviewed by* RUTH STRANG
- 307 **Psychiatry and Catholicism**, by J. H. VanderVeldt and R. P. Odenwald  
*Reviewed by* MAGDA B. ARNOLD
- 309 **Trends in Gerontology**, by N. W. Shock  
**A Classified Bibliography of Gerontology and Geriatrics: Supplement One, 1949-1955**, by N. W. Shock  
*Reviewed by* A. T. WELFORD
- 310 **Logique, langage et théorie de l'information**, by L. Apostel, B. Mandelbrot, and A. Morf  
**Les liaisons analytiques et synthétiques dans les comportements du sujet**, by L. Apostel, W. Mays, A. Morf, and J. Piaget  
*Reviewed by* DAVIS HOWES
- 312 **Mate-Selection: A Study of Complementary Needs**, by R. F. Winch  
*Reviewed by* GERHARD NEUBECK
- 314 **FILMS**  
By ADOLPH MANOIL, Film Editor  
Comprehensive Treatment in Mental Retardation, reviewed by G. M. Guthrie  
Anger at Work, reviewed by N. L. MUNN  
Rapid Treatment of Acute Mania with Combined Coramine-Electro-shock Technique, reviewed by W. E. OLSON and J. H. McCORMACK  
Films and Other Materials
- 317 **ON THE OTHER HAND**
- 320 **List of Books Received**

*Books for review*, review manuscripts, letters for publication, and correspondence concerning editorial matters should be sent to the Editor, Edwin G. Boring, Memorial Hall, Harvard University, Cambridge 38, Mass.

*Films for review* and correspondence concerning films should be sent to the Film Editor, Adolph Manoil, Park College, Parkville, Mo.

*Communications concerning subscriptions*, change of address, claims for the nonreceipt of a number, advertising, and other business matters should be sent to the American Psychological Association, Inc., 1333 Sixteenth Street, N.W., Washington 6, D. C. Address changes must reach the Subscription Office by the 10th of the month to take effect the following month.

*Contemporary Psychology: A Journal of Reviews* is published monthly. The yearly volume comprises approximately 384 pages. The subscription per year is \$8.00, foreign \$8.50, single number \$1.00.

Published by the American Psychological Association at Prince and Lemon Sts., Lancaster, Pa. and 1333 Sixteenth St., N.W., Washington 6, D. C.

Entered as second-class matter, February 21, 1958, at the post office at Lancaster, Pa., under the act of March 3, 1879. Accepted for mailing at special postage rate stated in section 132.122, Postal Manual.

© 1958 by the American Psychological Association, Inc.

# Contemporary Psychology

A JOURNAL OF REVIEWS

VOLUME III

October 1958

NUMBER 10

## Using the Mind to Show the Soul

Walter Houston Clark

*The Psychology of Religion: An Introduction to Religious Experience and Behavior.* New York: Macmillan, 1958. Pp. xii + 485. \$5.95.

Reviewed by JAMES E. DITTES

*Dr. Dittes is an instructor in psychology at Yale University. He is a Yale Bachelor of Divinity and also, in psychology, a Yale Doctor of Philosophy. He works mostly at that kind of psychology that should be useful in understanding the religious experience: permissiveness in psychotherapy, social acceptance and conformity in small groups, what makes comprehension sufficient to the comprehender.*

THE psychology of religion may have a claim to seniority among specialized fields of psychology. Questionnaire methods and Oedipal theories were hardly invented before they were applied to religion. The first of the steady stream of books to bear this title was E. D. Starbuck's in 1899, still three years before William James' *Varieties of Religious Experience* and well before the clear differentiation of most of the present fields.

Religion may attract psychologists with the hope that issues central to the study of personality may be brought to relatively clear focus in religious phenomena. Here, perhaps more exposed than anywhere else, can be examined such matters as the relation of affective and cognitive processes, the integration

of personality, the relative role of motives of aspiration and motives of desperation, and the transmission of values, attitudes, and controls.

The differentiation of the field, however, has proved too complete, and the specialty has lived a stunted, undernourished life. Unlike the other fields, the earliest books are still as useful as the latest. The domain of religion remains isolated, not well charted by psychologists and even less successfully mined for resources to illuminate more general psychological problems.

Walter Houston Clark, professor of psychology and dean of the Hartford School of Religious Education, has combed this relatively barren island and cultivated the occasional oasis to produce the best comprehensive review in at least thirty years. He has compiled, under the traditional chapter headings—religious growth, conversion, mysticism, worship, etc.—the major theoretical views and some representative data, and has managed to do so with some order and integration and with a readable style. Here are the chief theoretical contributions of William James, J. B. Pratt, G. W. Allport, and others. Here, too, are the tables of percentages of responses to questionnaire items,



WALTER HOUSTON CLARK

the content analysis of personal documents, and the naturalistic and anecdotal observations which predominantly characterize research in the field. And here, the more visible for the comprehensive review, are recognizable some of the important weaknesses which have left most of the work in this field, as Clark himself says, "elementary or thin."

ALTHOUGH frankly eclectic, Clark has not been without his preferences in selecting and emphasizing. Many of these seem traceable to G. W. Allport, to whom the book is dedicated and under whom the author wrote his dissertation in 1944.

Religion he regards almost exclusively as an affair of the individual and as essentially a cognitive process. In child-

hood, religion is mostly a matter of acquiring concepts, not of developing basic attitudes toward parents and other objects which may eventually find religious expression. "In its most essential aspect, worship is individual and private," and group processes are completely ignored. Social factors he relegates to a final chapter in which gross variables, such as class, are seen affecting certain 'secondary' characteristics of religious expression. To emotion he concedes importance in the form of the ecstasy of a mystical experience or the pleasure evoked by the cadences of the King James translation of the Bible. More fundamental motivational factors he accords but cursory treatment, such as the single sentence: "Concepts such as that of the fatherhood of God may satisfy the adult's need for dependence" (p. 241).

Clark prefers to analyze the phenomena to find distinctions, ideal types, and descriptive categories, rather than to approach the events with a more theoretically derived notion of functional relations. The classical distinctions are presented and helpfully reworked: James's healthy mindedness and sick soul, Pratt's paradox of subjective and objective worship, the ideal types of mystic, prophet, and priest, to which Clark adds the intellectual. There are some useful distinctions freshly emphasized by Clark, especially and most characteristically, a sharp difference between primary and secondary religious experience. This is the difference between "authentic," intensive inner religious experience, on the one hand, the "acute fever" type of religion which interested William James, and, on the other, routine, peripheral religious activity, often maintained for purely utilitarian reasons. It is the difference to which Allport has recently put the perhaps more appropriate labels, *intrinsic* and *extrinsic*.

Following William James, it is the primary religious experience of the few which Clark wants to study, and he makes the important point that conclusions concerning one type cannot legitimately be drawn from data concerning the other. Frequency of church attendance, conscious intentions of prayers, formal creedal adherence, and all

other variables so easily measured probably have slight relation with the fundamental orientations of personality which comprise "primary" religion. Indeed, it might be added that most religious prophets and reformers have apparently regarded the types as too often correlated inversely. Yet the available data too predominantly represent "secondary" religion for Clark to stick consistently to his distinction.

Necessarily correlated with these biases is the greater attention Clark gives to earlier authors and to those who wrote with some respect and sympathy for their subject matter. His preferences compel him to slight some important contributions to the field, most notably the more sociologically and psychoanalytically based views. He also happens to be relatively distant from the two movements in current religious thought which give most promise of offering the psychology of religion some important theoretical insights. These are the existential movement in theology, represented by Paul Tillich, and the increasing interest now given to the relation of religion and mental health.

THE author has, however, substantially achieved his aim, "to define and describe the field" as it exists, and he remains near enough the modal position to warrant a few more general comments here about the status of the discipline which his book represents.

To remedy the thinness and paleness of the field, Clark prescribes more vigorous exercise, with refined methodology, by which he usually means more reliable measures. As a founder and now secretary of the Society for the Scientific Study of Religion, he has done much to stimulate such research. But the diagnosis this reader makes of the field as Clark represents it is that it is already over-active, victim rather than master of methodology, too much concerned with measuring what it can reliably, too seldom letting important theoretical issues generate research. Clark's good chapter on methodology leaves the reader feeling all dressed up with no place to go. Not more active exercise is needed, but leisure for reflection, and above all, a chance to get out of the

isolated routine and mix freely with some of the neighbors among the psychological specialties.

Looking at the baffling array of phenomena that fall under the label 'religion,' the quickest closure is obtained by assuming that it all represents a single variable and may be dealt with accordingly, as by proposing a single determinant. This is the procedure of many who are unsympathetic with religion. Attempts at measurement may make it clear that distinctions are necessary. The easiest categories and variables to discover are the gross phenomenological distinctions used by the participants themselves; thus early work turned to such distinct phenomena as mysticism and conversion, and this is about where the field remains. Yet so long as attention is focused on the very interesting events, we are not likely to recognize the psychologically more relevant factors which pervade the phenomena. Psychology of religion still has to begin the arduous task of replacing phenotypical, *ad hoc* concepts with more genotypical, analytical variables, following a trail along which other areas of personality and social psychology, especially abnormal psychology, are not too far ahead.

The work already done in these other areas should provide important help. The psychological molecules of religion are probably not arranged along the lines by which the participants find it useful to arrange their experiences, in categories of prayer, belief, conversion, and the like. But rather, cutting across these divisions are undoubtedly more psychologically discrete variables, like dependence, guilt, and social influences. So long as the religion of childhood can be discussed without developing any of the concepts most current in child psychology, so long as doubt and conflict of belief are analyzed without use of classic conflict models and without reference to such matters as decision-making or intra-psychic conflict, so long as the cognitive nature of religion can be examined without mention of attitude change, concept formation, personal constructs, semantic differentials, social perception, intolerance of ambiguity, and the like, just so long is the psychology of religion condemning itself to an un-



necessarily barren exile from the main concourse of psychology.

Indicating an encouraging move in the necessary direction, the final three chapters of Clark's book make overtures toward a speaking acquaintance with abnormal psychology, psychotherapy, and some aspects of social psychology.

Alongside the concepts and theories already developed in other areas of psychology, the psychology of religion may also find it useful to consider some of the relevant theological views. 'Primary' religion necessarily involves particular beliefs and particular commitments, whose antecedents and functions have often been considered with some fairly precise theological doctrines that may be translated without great strain into testable theories. Theological assertions about the nature of deity may not be put on the experimental block; but assertions about differential consequences of different notions of deity do indeed suggest interesting hypotheses.

THE book will undoubtedly be widely adopted as a text where undergraduate courses in the subject are offered, and it will prove useful. A 32-page section of "study aids" includes suggestions for further reading, discussion, and research. The 15-page bibliography is as complete as any available, though, as in the text, journal references are slighted. Each chapter ends with a pithy summary which is more than a recapitulation but is itself a fresh, compact essay on the topic of the chapter. A final brief chapter reviews eleven "threads of thought" which the author has found running through the chapters. Thomas Carlyle's *Sartor Resartus* is the most frequently cited personal document, and it is useful to have this added to the store of illustrative documents.

The appealing, sympathetic, yet forthright manner of the author will successfully invite religiously oriented persons to look more carefully at the psychological dimensions of their religious experience. Where the courses are taught in departments of philosophy or religion, the book may seem sufficiently psychological, but students with a good

introductory course in psychology behind them will be restive. The book will save them and their lecturers much of the chore of combing through a too unrewarding literature. It may be hoped

that the time they save can be put to productive use, making contemporary psychological thought a guide to finer analysis of the phenomena of religion that are here described.

## Abroad with Multiple R

Philip H. DuBois

*Multivariate Correlational Analysis.* New York: Harper & Brothers, 1957. Pp. xv + 202. \$4.50.

Reviewed by ROBERT P. ABELSON

*Dr. Abelson says he is a product of the Psychometric Fellowship program at Princeton and the Attitude Change group at Yale, where he is now an Assistant Professor of Psychology, although he wrote this review at the Center for Advanced Study in the Behavioral Sciences at Stanford. He is a very statistically minded and critical psychologist and he might some day write a book on multivariable analysis or maybe not. Wait and see, he says.*

BEYOND the elementary in statistics texts for psychologists, there lies a lot of territory which has not been mapped. Not, at least, in a way that provides the statistical layman with the feeling that he understands the strange local customs, or can easily ask the way if lost. The publishing houses, noting the rush of tourists to far-off quantitative isles, have encouraged the production of texts functioning as pocket dictionaries and Michelin guides. No one need be surprised; the statistical retooling of the social sciences is a massive enterprise requiring popularization.

DuBois chooses to map the circumscribed territory of multiple regression, partial, part, and multiple part covariance and correlation, and some aspects of factor analysis. The book is lean, neat, tidy. The author eschews ugly-looking formulas and long derivations. At the price of denying the reader any preparation for more advanced texts, he also forgoes matrix algebra. The concepts he introduces are repeatedly interwoven with one another. A simple

step-by-step procedure for working out multiple R and sets of beta weights is the most prominent feature.

DuBois' computing routines have the advantages of simplicity and of keeping the investigator 'close to the data.' He emphasizes the fact that every entry in his "Multivariate Analysis Chart" is either a partial variance, a partial covariance, or a partial regression coefficient—meaningful quantities all. 'Keep your nose to your numbers' is good advice from one point of view. High-speed computers, on the one hand, and non-parametric statistics, on the other, have to some extent encouraged an overly prophylactic regard for data.

DuBois has helped us in this respect, however, only to hurt us in another. His book does not tell when to use the techniques and when not, nor why and why not. We are faced with the tourist's difficulty: we are instructed in the letter, but not in the spirit. We learn language, not culture.

There are not enough actual data; what are presented concern the psychological testing of large batteries on large samples. This type of example does not do justice to the potential applications of correlational analysis in the social sciences. Concern with large samples, furthermore, makes the book quite non-statistical in the usual sense. *Confidence limits, sampling error, and significance test* do not appear in the ten-page Glossary. Statisticians reading this book will also look in vain for the distinction between the correlation model, in which all variables are normally distributed,

and the regression model, in which the criterion is normally distributed, but the predictors are fixed variables. (Statisticians are wont to accuse all psychologists of confusion on this score.)

In his treatment of factor analysis, DuBois proposes a variant on ordinary methods purporting to avoid the usual communality problem. This reviewer, however, prefers the frying pan to the fire. There is probably very little difference in practice between DuBois' method and Thurstone's group centroid method, except for the greater labor of the former. An important procedure with new methods is to try them on data where the answer is completely known. DuBois presents such an example, but it loses force because sampling errors were not superimposed on the known factor structure before applying the method. Several other technical matters are open to serious criticism as well.

I WOULD not claim that this book will be badly received. A great body of readers may be delighted with it for the simplicity and clarity of its guidance. This is the author's intent and the book's merit. However, the work is in many respects a hasty travelogue through multivariate terrain. There is much more to be known about the provinces than we are led to expect.

Those who have taught statistics to students of psychology (or related disciplines) are probably familiar with the following phenomenon: if you tell the class that there is but one way to approach a problem, they will seize upon it brightly and eagerly; but, if you say there are two different ways to approach the same problem (and that they are both approximations), you are met with sullen disappointment. Faced with this pedagogical choice, I for one favor giving the facts of life. The present treatise does not do so. From the reader's own pedagogical choice, his evaluation of the book will follow.



*Facts are stubborn, but statistics are more pliable.*

—ANON

## Sigmund Freud, Supersalesman

Robert Ferber and Hugh G. Wales (Eds.)

*Motivation and Market Behavior.* Homewood, Ill.: Richard D. Irwin, 1958. Pp. x + 437. \$7.80.

Pierre Martineau

*Motivation in Advertising: Motives that Make People Buy.* New York: McGraw-Hill, 1957. Pp. xi + 210. \$5.50.

Joseph W. Newman

*Motivation Research and Marketing Management.* Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1957. Pp. xiv + 525. \$7.50.

Reviewed by RAYMOND A. BAUER

*Dr. Bauer, a composite sociologist, anthropologist, and psychologist, who has been around Harvard and the Massachusetts Institute of Technology for a long time, is right now Visiting Professor in the Harvard Graduate School of Business Administration, where he is interesting himself and others with mass communication in American society. That is why CP asked him to take this whole, much discussed problem of Motivation Research and make it clear to CP's readers. CP has reviewed Bauer's Nine Soviet Portraits (May 1956, 1, 149), and Bauer has reviewed for CP Ross and van den Haag's The Fabric of Society (June 1958, 3, 160f.).*

VIA occasional book reviews but more often through the public press, psychologists have been reading for the past few years about a mysterious something called Motivational Research or "M.R." The appearance of three new books on this subject provides an appropriate occasion for some general comments on "M.R."

M.R. groups nicely together with propaganda, brainwashing, subliminal advertising, and the concern of Skinner, Rogers, and other psychologists over what we shall do with our ultimate knowledge of how to control human be-

havior. It is my impression from talking to psychologists, and from some of their printed statements, that they take quite seriously the possibility that Motivation Researchers are indeed wielding some magical influence over the buying behavior of the American public. If the reader's sole purpose in perusing this review is to find an answer to that question, the answer is simply that there is no basis for assuming such magical influence is indeed being wielded.

While there are many pat definitions of Motivation Research—such as that it is "the application of principles of modern dynamic psychology to the marketing of goods," a synthetic definition and, in this context, a representative one—it is in fact difficult to describe simply just what Motivation Research is, how it is done, or what its merits and demerits are. Proponents of M.R. (cf. Newman and Martineau) suggest that it is a new and revolutionary approach to market research. On the other hand, old-time well-established market researchers like Elmo Roper, Alfred Politz (cf. Politz and Scriven in Ferber and Wales), and others have complained frequently, in print and on public platforms, that there is nothing new in being interested in motivation in market research. If we were to attend only to the opponents of M.R., we should come

away with the impression that Motivation Researchers have introduced into market research just two developments: an ability to sell their services by injecting sex appeal in their approach to clients; and the rationalization of using small samples and sloppy procedures. It is more accurate to say that the Motivation Researchers have focused their attention on psychological (and sociological) factors in consumer behavior more intensively than has been customary in the past, and that their work is more appropriate to the initial than the terminal phase of investigation.

The depth interview and projective techniques are the standard instruments of the Motivation Researcher. The projective techniques employed are modifications of the instruments regularly used by psychologists in diagnostic and research work. The TAT (Thematic Apperception Test), for example, often gets boiled down to a picture with 'balloons' into which the subject is supposed to supply the legend of what is on the mind of the person in the picture. Some researchers have actually used the standard Rorschach Test, but—as one might suspect—this procedure is prohibitively expensive, especially if trained interpreters of the Rorschach are hired. In general, the trend seems to be to stabilize on the use of standardized, watered-down versions of the regular clinical instruments—an inevitable procedure, if one is to process even reasonably large batches of data with speed and economy.

Similarly, the 'depth interviews' employed are something less than the full-length psychoanalysis that seems to be implied in the more scary exposés of M.R. Where I have had the opportunity to observe them, these interviews were skilfully conducted, focused interviews, designed to keep the respondent talking freely and at fair length on a given range of subjects.

All in all, Motivation Researchers gather a richer body of material than has been customary in earlier market research. Such material is excellent for the formation of hypotheses (a point which Newman stresses heavily). Nevertheless, any researcher who has worked with such 'rich' data knows how difficult and expensive they are to handle. I see

no evidence that the Motivation Researchers have overcome this difficulty any more successfully than have their academic colleagues. Hence, far from being the answer to all marketing problems or even the basis for the establishment of 1984, it seems to me that Motivation Research will find its stable future simply as one aspect of market research.

**E**XTRAVAGANT claims have been made for the success of Motivation Research. To students of social communications and advertising practitioners the notion of an omnipotent technique of social persuasion has a fey, opium-dream quality. Some of the practitioners, it is my guess, wish that were true; but the Motivation Researchers presently find no consolation in the view that they can produce miracles, and some of them at least are trying to give their clients a more realistic view of what they can accomplish.

Measuring the effect of advertising is one of the most difficult tasks with which one can be faced. It can be said, however, that *field* studies (by this I mean to draw a hard and specific line between field and experimental endeavors) of the effects of communications invariably are at best inconclusive. People are stubborn in their selection of the communications to which they will be exposed; and then they bend the content of the communications to which they are exposed in whatever direction suits their purpose. True, the \$64,000 *Question* program sold a great deal of Revlon, but this was scarcely the result of Motivation Research. Increases and decreases in sales are the result of so many factors that it is virtually impossible to isolate the effect of any one of them. It is alleged that market researchers have tricked the average housewife into spending 15% more for her supermarket purchases than some stringent criterion says is necessary. But, what got the housewife out of the corner grocery and into the supermarket? And how much of this excess spending was attributable to the lush economic circumstances of the past few years? Have any studies been made in Detroit during the recession of 1958?

Remember, no one product has more than a minority share of the market (A.T. and T. telephone service excepted). Either no omnipotent promotional techniques have been developed, or everyone possesses them and a standstill has been reached. In the latter case, I think reason would be on my side if I insisted that there is a standoff in a fight between omnipotent techniques; and this is the same as saying they are not omnipotent. Advertisers, however, seldom hope, in sane moments, for omnipotence. An additional 2% or 3% of the market can represent a tremendous advance. Accordingly any device which promises some substantial improvement is worth a good deal of money.

**T**HE major idea which Motivation Research has stressed is the importance of the 'secondary' characteristics and functions of products and advertising. Thus, an automobile is not only a medium of transportation, but a device for achieving status, for expressing one's self-image, and perhaps for working out some repressed sexual conflict. Or, in the world of advertising itself, an advertisement communicates more than its overt verbal content: it has color, layout, etc.; it says something about the product, its seller, and its probable purchasers. In principle, psychologists ought to approve of this orientation. In fact, they ought to go further than most Motivation Researchers and object to the labeling of the desire for prestige as an 'irrational' motive for buying an automobile. Perhaps one might argue that the purchase of an automobile is an inefficient way of getting prestige, but if one seeks transportation to and from place of employment, an automobile may be less efficient, dollar for dollar, as a means of transportation than as a source of prestige.

Certain issues of social policy arise out of this doctrine. In all probability Motivation Research, to the extent that it has or will be adopted, will result in the relative deterioration of the 'primary' qualities of products. We will probably get bigger tail fins, more horsepower, and poorer transmissions (relative to what they could be) in our au-

tomobiles. This order of problem, and the entire question of the role of advertising in our society, however, strikes me as beyond the scope of this review. In the meantime, we can wait to see whether or not the inroads of foreign cars into the American market may not bring about a reversal of trend.

**D**OES Motivation Research produce 'manipulation' of people? It is true that many motivation researchers couch their conclusions in terms of unconscious motives which they have inferred from their findings. Even psychologists, including those who are skeptical of Freudian psychology, respond to the notion of appeal to unconscious motives with a spontaneous raising of eyebrows. Most of the successes to which Motivation Research lays claims could, however, be interpreted equally well on a conscious level. One of the most persuasive cases which Newman presents is that of the State Farm Mutual Insurance Company, which found out *via* Motivation Research such things as that it was important that clients should think the insurance company is 'on their side.' Such an issue is scarcely unconscious. Nevertheless, the possibility of 'unscrupulous manipulation' still exists, in that an insurance company could conceivably give clients poorer terms and make more money by building up some of the 'psychological' aspects of the company-client relationship. Still, we are not dealing with a qualitatively new problem, but with a continuous extension of the old problem of the extent to which one man may ethically use knowledge against the interests of another. I do not feel complacent on this subject, and I would not have the reader think for a moment that this is not something about which to be concerned; but, I do not see that Motivation Research has brought about any qualitative change in the picture. Appeal to unconscious motives is far from a guarantee of manipulative success. Defense mechanisms operate even, perhaps especially, on the unconscious level. While such defenses are seldom under the individual's conscious control, they are also unlikely to be under the conscious control of the manipulator.

Perhaps the reviewer is unusually obtuse—or unusually brave—but he has not found it in his heart to get scared.

It is not easy to learn about Motivation Research. There is a good deal of conflict over the subject, the sort of conflict that occasionally leads one to suspect that where there is smoke there need not necessarily be fire but merely smudge pots. The bulk of this conflict occurs in sources which most psychologists do not read. The Ferber and Wales book assembles some of the articles of controversy, and gives the reader the flavor of the fight.

Even if one has contact with the agencies doing Motivation and other kinds of research, as I have had the opportunity, he does not learn all he would like to. Some of this difficulty is due to understandable reluctance of the various research agencies to reveal information which may be commercially 'classified.' Market research is, after all, a competitive business. But, more important, is the fact that the sort of information one really wants to have can be gotten only on the basis of intimate, day-to-day contact with a research organization—and this, far more than reticence on the part of the Motivational Researchers, is the primary handicap to getting such an understanding.

**J**OSEPH NEWMAN has spent the necessary time, or at least a lot more than any other outsider, in getting acquainted with the work of Motivational Research. His book is an intelligent, responsible advocate of the merits of Motivation Research. Designed for reading by the inquisitive businessman, it gives, page for page, more information about the actual working of Motivation Research than any other book of which I know. It has been successful in persuading many businessmen to turn to Motivation Research. The weakness of the book is its author's failure to anticipate the legitimate criticism of some of the work Motivation Researchers have done—such as trying to get too much mileage out of too few cases. Aside from this, the volume is highly competent, a balanced job.

The book by Ferber and Wales gives the best available version of the tech-

nical problems of this research area. Not only do they cover many of the elements of controversy in and over the field, but they reproduce standard articles on technical problems of projective techniques by such psychological stalwarts as Gardner Lindzey and Daniel Miller.

The Martineau book is a Grade A example of the mind of the Motivation Researcher at work. Martineau, as Director of the Research and Marketing Department of the *Chicago Tribune*, has done much to stimulate Motivation Research in advertising. He makes an eloquent statement of the role of the less suspected motives for buying goods, and of the importance of non-central aspects of advertising.

**I** HOPE the readers of *CP* will forgive my closing with a whimsical rumination over the problem of who manipulates whom. An experimentalist friend recently complained that his dogs, his experimental subjects, were manipulating the daylights out of him. He had to accommodate his experimental procedures to the individual characteristics of his dogs. On the wall of his office hung a picture of two rats in conversation. One of them is boasting that he has trained a psychologist to deliver a pellet of food every time he (the rat) pushes a lever! Perhaps there is something of this in every act of manipulation. To influence the other person we have minimally to enter temporarily into his frame of reference. At the very least he has, therefore, affected some small element of our thinking. It is not unreasonable to regard research into consumer behavior as a basis for the accommodation of the marketers' behavior to the consumers' desires. Thus, we get from businessmen the irritating comment: "We're only giving the consumer what he wants!" To the extent that this is true, the psychologist, *qua* citizen, is faced with a decision as to with whom he has a quarrel. Is it with the businessman for not having the right motives? With the researcher for misleading the businessman? Or, with the consumer for having the wrong motives?



# On Even Keel through Parapsychology

Gertrude Raffel Schmeidler and R. A. McConnell

*ESP and Personality Patterns.* New Haven: Yale University Press, 1958.  
Pp. xiii + 132. \$4.00.

J. B. Rhine and J. G. Pratt

*Parapsychology: Frontier Science of the Mind.* Springfield, Ill.: Charles C Thomas, 1957. Pp. ix + 220. \$4.75.

Eileen J. Garrett (Ed.)

*Beyond the Five Senses: An Anthology from TOMORROW.* Philadelphia: J. B. Lippincott, 1957. Pp. 384. \$4.95.

Reviewed by MICHAEL SCRIVEN

*Dr. Scriven, a member of the Department of Philosophy at Swarthmore College, has a BA in mathematics and a MA in mathematics and philosophy, both with honors, from Melbourne University, and a PhD in philosophy, with a thesis on the Logic of Explanation, from Oxford University. He has been co-editor with Herbert Feigl and Grover Maxwell of the first two volumes of the Minnesota Studies in the Philosophy of Science (CP, 1957, 2, 212f.). His specialties are said to be symbolic logic, methodology, automobile engineering, and parapsychology—this last presumably because he feels that emotional unreason ought not to prevail. At any rate he has belonged to various of the societies of 'psychical research.'*

**T**OUGH-MINDED, tender-minded, or soft-headed, there is something here for you. Parapsychology is a new field, and the problem is to decide whether it's new like phrenology or new like physiological psychology, whether it has a great future as an historical example or as a respectable subject. Add to its novelty the fact that it is by definition the repository of the hopes of behavioral anti-scientists, religious scientists, and superstitious nonscientists, and one

begins to understand the usual reactions of psychologists. On the whole, however, it is about time they began to understand their *own* reactions and stopped acting like stock examples for a theory of socially conditioned perception. The height-of-amused-tolerance school favors the argument that there are still *lots* of things to be done in the field of normal perception before we have time to waste looking into the science fiction area. The let's-not-rush-into-this thing group feels we should really wait until something more substantial appears. The absolutely-open-minded-but-haven't-you-heard bunch trots out a story about how the statistics has been disproved in *Nature* or about a lab assistant from Duke who has told all. And so on. Well, colleagues, if there's anything to this stuff, it is more important to psychology than relativity was to physics; if there's nothing to it, the statistical underpinning of ordinary psychology is overdue for collapse; and, whatever there is *to* it, there's an awful lot of it, and it won't come out and talk to you, so you will actually have to go read some of it before you can seize on those little anecdotes as salvation.

You could do worse than start with the first book on this list. You could

also do worse than the third, but not easily, and I am not suggesting you try. This set of books admirably illustrates the problems and successes of the field. The first is a cautious, scientific, report of several years' work on the correlation of ESP (that's extrasensory perception) with attitude, personality, and drive condition. It is written by the experimenter—a professional psychologist (Harvard PhD)—and a physicist with unusual statistical accomplishment, who cooperated on the analysis. In general, it appears extremely valuable and perfectly valid; some minor complaints will be listed below. The second book is the first real candidate for college text in parapsychology, though it is also intended for the intelligent layman. It is by the two senior members of the full-time staff at the Duke Parapsychology Laboratory, the Old Firm, and it has certain drawbacks as well as advantages resulting from this status. The third volume is a collection of essays from a journal called *Tomorrow*, also edited by Mrs. Garrett. She is an ex-medium who has for many years been generously financing both scholarly and sloppy research via the Parapsychology Foundation. This book is heavily slanted toward the sensational, despite the dust-jacket claims to the contrary, and *most* of the contents is totally without scientific merit, consisting in anecdotes of hauntings, healings, and hypnosis. There are some notable exceptions, particularly those from the Duke people and Dr. Donald West, author of the superlative and devastating monograph *Eleven Lourdes Miracles* (i.e., all the postwar miracles); but nothing new at all.

**T**URNING back to the Schmeidler and McConnell book, the sceptic might abandon interest upon discovering that they use the Rorschach and the Rosenzweig as test instruments. The dubious validity of these tests, however, does nothing but place an upper bound on the size of *correlations* with the ESP capacity. ESP's *presence* was shown independently of any projective tests, on the basis of a division of the subjects (C.C.N.Y. psychology students) according to their attitude towards the

reality of ESP. The differences were small absolutely but remarkably consistent, and eventually produce a null-hypothesis probability of .00003, for 1,157 subjects and 250,875 trials. Thus the insignificant *over-all* deviation has a highly significant fine structure, and a great merit of this work is the extreme care with which the possible difficulties for this conclusion are approached—scoring errors, non-normality of data, subjectivity of classification, and so on. If their later investigations into the personality correlations yield less positive (though occasionally suggestive) results, they are still of some importance for this fact alone.

There are some phrasings and remarks which will raise a sensitive hackle or two; e.g., the description of volunteer subjects as unselected (p. 16); the attempted distinction between statistics as an experimental tool and as a logical tool (p. 26n; it has no apparent effect on the practice, however); the highly subjective comments on the personality of subjects (e.g., pp. 27, 29, 45; again used only as suggestive of careful study); and some over-pessimistic remarks about repeatability (p. 85). But there are also some worthwhile methodological comments about experiments where the personality of the experimenter is a variable (p. 101), and about the limitations on the prediction of ESP capacity due to the limitations on psychological prediction of most kinds imposed by present tests (p. 105). The 10-page appendix on statistical procedures—which are also discussed extensively in the book—appears sound and is highly sophisticated. The minor faults must be judged by the standard used when we examine a book on a more orthodox topic, and just as many objections can be raised to various remarks in, for example, Skinner's *Verbal Behavior* or Humphrey's *Thinking*. The present objections are, moreover, of less crucial a nature for the central theme of the work.

In dealing with Rhine and Pratt's book, however, it is much less easy to separate the valuable from the vacuous. The book's merits are substantial: it provides a brief up-to-date survey of the major research results in the eight or ten main fields of parapsychological

work, and it provides a handbook for those interested in understanding or continuing this work—complete with specimen score sheets and statistical tables. Even though there is a great deal of such research and a good many interesting and specifically parapsychological research designs (drawn up for it by R. A. Fisher and others), the book could have been cut by a third. There is much repetition in the discussion and a great deal of extremely dubious interpretation, despite the several disclaimers ("this is not a book of interpretation," p. 101). This discussion centers around the thesis that parapsychology demonstrates "that, contrary to some of the limiting philosophies that currently prevail, nature extends beyond the domain of purely physical laws" (p. 6 *et passim*). Nature does no such thing and, if James Clark Maxwell, Einstein, and Planck did not make any such claim, then the present authors need not feel ashamed for withholding one. A revolution in our knowledge of the physical world is not "a scientific rebuttal to materialism"; it does not "remove the road-block of mechanism"; it comes nowhere near making "it necessary to assume interaction of [paranormal mental] and physical processes" (pp. 6, 123).

A GENERAL problem of considerable interest underlies these claims about the world-shaking effects of parapsychology (or, rather, 'world-picture-shaking'). A good many tough-minded psychologists will be very scornful of the remarks quoted in the last paragraph without realizing that their scorn indicts them as even more guilty. For it is probably less of a mistake to suppose that ESP has these effects than it is to suppose ESP has not been established by the existing evidence. Since no weaknesses have been pointed out in either the design or first-stage interpretation of the major ESP experiments (there are about ten really important and wholly un-

connected series—involving no common subjects or experimenters or witnesses—which is more than can be said for consistent latent learning experiments), the only grounds for rejecting them or questioning the integrity of the experimenters is the incompatibility of the results with general principles of nature which we feel are better established. Now this is not, as has often been suggested, anti-empirical apriorism: up to the point where it involves a refusal to examine claimed counter examples, it is the perfectly standard scientific procedure of using indirect evidence. Yet it is only valid if (a) there really is an incompatibility and (b) the ESP experiments can be shown to be unsatisfactory. Hence the psychologist who is scornful about the ESP results without being able to produce specific errors in them is relying upon (a). And so are Rhine and Pratt. The only difference is that Rhine and Pratt have the decency to accept results no one has been able to fault and thus quite properly use (a) to disprove the traditional doctrines.

The correct reasons for rejecting their position have been pointed out by P. E. Meehl and the present reviewer (*Science*, 6 Jan. 1956, vol. 125); one cannot sustain the claim of incompatibility. At most, only local modification of physical principles is required by the acceptance of ESP and PK (psychokinesis) and, despite consequences which are perhaps a little more interesting philosophically than those of hypnosis, they do not really compete with quantum theory or relativity for philosophical sensation value.

I hope I have indicated in this review the importance of dealing with each individual claim and interpretation in parapsychology on its own merits. It is important to die in the last ditch for Science against Superstition, but in that battle one needs not only stout hearts but sharp eyes with which to decipher the signs on the ditches.



*We are incredibly heedless in the formation of our beliefs, but find ourselves filled with illicit passion for them whenever anyone proposes to rob us of their companionship.*

—JAMES HARVEY ROBINSON

# CP SPEAKS

## INDICES

YES, Virginia, *CP* will have an index—two of them, subject and name. Actually there's nobody so bitter about indices as to be willing to write a letter suggesting that *CP* do without its troublesome but useful tail. The librarians got down on their knees and pled. Others said: Of course. One teacher refers his students to *CP* via the index. The reader-response was prompt, not huge, but convincing to *CP* whose pride was already engaged for an index. So, Virginia, Santa Claus will have an index for you, not on Christmas Day, but just as soon after as he can turn December galleys into pages and do the necessary work.

## CP's ROLE

AT last *CP* is able to come up with some of its vital statistics, promised long ago but delayed because the Assistant to the Editor, who took on the job, has to get some sleep once in a while. The work was complicated by the suggestion of the APA's Publication Board that *CP*'d better find out for multiple reviews how well they agreed with one another in over-all assessment, an analysis that proved illuminating. So see the report of the Assistant to the Editor in this issue. The Editor contents himself with brief comment here.

*CP*'s coverage seems to be good as compared with the past. *CP* reviews about 275 books per annum, whereas the APA journals which *CP* displaced in the reviewing function covered about 150 books per annum. The set of current non-APA journals selected for comparison review just about as many books as *CP*—260 per annum.

Nearly one-third of the books reviewed by the APA journals before *CP* began received more than one review in these journals (besides the undeter-

mined additional reviews in non-APA journals). Now, with *CP* in operation, just about the same fraction of its books are reviewed in the selected comparable list of non-APA journals. Multiple reviewing in *CP* is negligible for the reasons that have been discussed previously. The principal reason is avoidance of redundancy. *CP* hopes—believes even—that voluntary critical counter-reviewing is growing in ON THE OTHER HAND. (Cf. *CP*, Aug. 1957, 2, 210f.; Oct. 1957, 2, 261.)

One of the most interesting facts is the finding that favorable reviews outnumber the unfavorable 4 to 1. Here perhaps is to be found a little of the reason why the unfavorably reviewed author thinks that a second review would be favorable. Most reviews are favorable; it must have been bad luck that he ran afoul of a crabbed idiosyncrat. That is, of course, not the whole story of ego-defense. Authors regard as unfavorable reviews which uninvolved outsiders count as favorable. The correlation of value judgments between different reviewers of the same book is high. In only 13 per cent of the cases were the differences in evaluation great, but the figures are distorted because of the piling up of favorable reviews. Nor are there enough unfavorable ones to make double condemnation frequent.

There is thus also the question as to whether reviewing is too generous to the authors. The report notes that bad books are apt to be suspected early and eliminated without review. Sometimes even the reviewer, after the Editor and the Consultant have successively passed the book along for review, writes in to say he thinks the book not worth reviewing. In such a case, his judgment is always accepted. Another view is that reviewers lack courage, especially when they know the author personally, and very espe-

cially when they like him. These critics of reviewing want anonymous reviews (*CP*, June 1957, 2, 164f.). In spite of them *CP* still believes that responsibility has in this situation to be substituted for the freedom of anonymity, that responsibility will and can summon courage.

If only psychological competence were synonymous with emotional maturity! If only the commonly held belief in psychological determinism assured tolerance and objectivity—about others and about oneself—then the reviewers could chuckle at *non sequiturs* without ridiculing the author, and the author could be as resigned to his intellectual myopia as he is to having to wear glasses. And the lion and the lamb. . . . Or doesn't the libido want peace?

## NOTEHND F PSLGTS

T dif btw an ink blot & Lcln's Gtbg address lies prtly i t clarty v t itendd cmncn. T mng v t inkblot v obscure bc v t blot's ambigty. T clarty v t Gtbg address is isured b its rduncy. Tr is bt ltl ambigty i ts prest par. if y r an edd, Eglsh-spkg, fairly br-pslgt. T txt tho diff is clear bc tr is a ltl ambigty i it. It wd nt d at all as a projn test. Tho clear it is diff bc tr is s ltl rduncy to it. Bc it hs bn stripd V alphabetcl rduncy, it is ecl. T ltrs tt r unec f a pslgt's ustgd v tse wds hv bn rrmoved. I short, ts is W. S. Tyler's Notehnd f wrig w a savg v 30%. Y cn gt t 5-p. key if y send hm \$.24 i stamps at 15 Pierce Hall, Smith College, Northampton, Mass., & tt lvs hm n profit. H j blvs tt i tse ds pslgts o- to b spendg tr ti advancg k istd v wrig unec ltrs v t alphabet, & tt wn, as i tkg notes, t xtra ti f wrig t xtra ltrs simply is nt tr, ty jolly wl hv to b ecl & m- as wl b t- to d it idtly.

## TYLOR'S CLASSIC

DR. John Whiting, psychologist-anthropologist and Director of Harvard's Laboratory of Human Development, comments, at *CP*'s request, on the reprinting of Tylor's anthropological classic.

An anthropological classic has just been re-published in a two-volume paper-backed edition in the Harper Torch Books Series.

# Announcing a new Supplement

to the

## Harvard List of Books in Psychology,

compiled and annotated by  
the psychologists in  
Harvard University,

and edited by  
E. G. Boring

A self-covered pamphlet  
containing 92 new entries,  
with an index.

### COLLABORATORS

Gordon W. Allport	Allen W. Mills
Raymond A. Bauer	Edwin B. Newman
John G. Beebe- Center	Douglas Porter
Abraham H. Black	John P. Spiegel
Edwin G. Boring	B. F. Skinner
Roger W. Brown	Joseph C. Stevens
Jerome S. Bruner	S. S. Stevens
Ray Hyman	Philip Teitelbaum
Eleanor E. Maccoby	David V. Tiedeman
George A. Miller	Robert W. White
	John W. M. Whiting

Supplement \$.50

Book plus Supplement  
\$1.50

**HARVARD UNIVERSITY  
PRESS**

79 Garden Street  
Cambridge 38, Massachusetts

This is Sir E. B. Tylor's *Primitive Culture*, first published in 1871. Volume I, which was Part 1 of the original work, is concerned with the origins of culture, and presents Tylor's theory of cultural evolution. Volume II is entitled *Religion in Primitive Culture*, and is a reproduction of Part 2 of the original work.

Tylor in anthropology has a status equivalent to that of Darwin in biology, and the two were contemporaries. Although Fraser's *Golden Bough* is a much more well-known book outside the field of anthropology, Tylor's work—dealing with the same types of materials—is much more respected within the field.

### A NEW JOURNAL FOR INDIA

INDIA now has a new journal called *Pratibha: Journal of the All-India Institute of Mental Health*. Reporting on the first issue at CP's request, Gardner Murphy says:

The new journal will orient itself to progress in psychiatry as known to the Western World, finding a place for biochemistry, physiology, projective tests, the re-settlement of the chronic schizophrenic, sex differences in value patterns, and similar themes. It does not betray as yet much contact with psychoanalytic thinking, nor with India's own psychological history. The All-India Institute of Mental Health, established and supported by the Government, is a training center in the modern disciplines concerned with mental health; and one might properly infer from this first issue that emphasis will be placed on modern hospital organization and the teaching and research facilities to be expected in a modern psychiatric hospital. The journal does not appear as yet to have found a primary direction or emphasis. The word *Pratibha* is said to indicate an integration of science, literature, art, and the humanities.

### BOOKS TO COME

SENSATION, perception, learning, motivation are the categories which, when taken in that order, summarize the history of scientific psychology. In these days the new topic, motivation, tends to assimilate rather than supplement the old topics of learning and perception. McGill's Dalbir Bindra is advancing on this frontier. He and the Ronald Press mean to publish next January his *Motivation, A Systematic Reinterpreta-*

*tion*. Bindra recognizes as his more immediate ancestors P. T. Young (1936), B. F. Skinner (1938), C. L. Hull (1943), and D. O. Hebb (1949). His approach is intermediate between the Skinnerian (no N. S.) and the Hebbian (hypothetical N. S.). He scorns the conventional concepts, instinct, drive, and need, and writes chapters about observable, effective, independent variables, like sensory cues and blood chemistry. He has been working on the book a long time, so it might be good.

THE publication by Harpers in 1945 of Max Wertheimer's *Productive Thinking* was an important event, compressed into 224 pages, yet important because of its author and the significance which he saw in this topic. So many of us admired Wertheimer and complained only that he published so little. Now it is good news that Michael Wertheimer, fils, has in hand about a hundred pages of his father's MS, all examples of how to approach the understanding of thinking or illustrations of what he meant by 'Gestalt logic.' The son is editing the father's pages and Harpers will issue, before the end of the year an augmented edition of *Productive Thinking*. That is good news.

INDUSTRY uses psychological thinking and practices wherever it can, and nowadays it not only tries to select proper personnel but also to improve them after it gets them. The old "appraisal interview" was where the boss had the underling in and discussed with the underling how he could improve himself—so that he matched the boss's ideals better. Norman R. F. Maier used to fight that idiosyncratic procedure. Now, however, he is coming out with a book—late this year or early next—that is called *The Appraisal Interview*, a book that tells about a different kind of interview, one that gives scope for individual development, idiosyncratic for the underling rather than for the boss. The whole situation is examined. Does the job need changing, or the climate in which the work is done, or the boss himself? That sort of thing. John Wiley is the publisher.

—E. G. B.



# CP's Role in the Reviewing of Psychological Books

By EDITH L. ANNIN

Miss Annin is Assistant to the Editor. All Consultants, de jure and de facto, know her well. All reviewers have at least a multiple postcard acquaintance with her. She is CP's dea in machina and its Editor's altera ego.

"SCIENCE is its books," said CP's Editor, discussing his plans for the new journal when it was still in its formative stages. "The policy of this new journal will be to publish as promptly as possible critical reviews of current books. . . . [Its] purpose is to make . . . the book phase of psychology actual and alive to its readers" (1). What has CP been doing with psychology's books? It has now, when this is written, completed two full years of publication, 1956 and 1957, and here undertakes to report to its readers on at least the more tangible phases of its operations.

What was CP's original mandate? To review books in the field of psychology—all of psychology. Previously, four journals published by the American Psychological Association (APA) had contained book reviews. The *Psychological Bulletin* had carried the largest number, with the greatest range of subject-matter; the *Journal of Abnormal and Social Psychology*, the *Journal of Applied Psychology*, and the *Journal of Consulting Psychology* had concentrated on books falling within their respective fields. The APA believed that its four book-review sections, when added together, represented the whole spectrum of psychology (2), and in this belief it was, so far as CP's experience goes, justified. CP has tried hard to cover the whole field and now discovers that the percentages of books it has reviewed in the various fields of psychology are very nearly the same as in the old days (Table 5). A book-review jour-

nal would, the APA nevertheless hoped, review more books in all, review them more promptly, and ensure that certain books were not lost by falling into gaps between one journal and another (2, 3).

CP has reviewed more books (Table 3) and it has reviewed them, on the whole, more promptly (Table 4). The average length of its reviews falls between the high and low limits set by the *Journal of Abnormal and Social Psychology* and the *Journal of Consulting Psychology* (Table 2). It cannot, of course, say how many books it has reviewed that would have been missed under the old system, though it can claim that it has missed very few that it thinks should have been reviewed, and those mainly because of circumstances beyond its control (CP, Oct. 1957, 2, 261; May 1958, 3, 125).

Another advantage anticipated as a result of CP's establishment was that centralized responsibility for book-reviewing would eliminate unnecessary duplication of reviews, while at the same time facilitating planned duplication—the reviewing of an important or controversial book by two or more reviewers simultaneously (4). The four

other APA journals did, in fact, give two or more reviews to between a quarter and a third of the books they reviewed (Table 7). CP, somewhat contrary to expectations, has had very few multiple reviews (Table 6) and has met with some criticism on that account. It has been suggested that duplication, planned or unplanned, is desirable; that an author, once unfavorably reviewed in CP, has no chance of being more favorably treated elsewhere; that CP has, in short, a monopoly of book-reviewing, with the attendant disadvantages.

This report discusses these objections at some length. There are many considerations involved, and the question of how best to achieve justice is a difficult one. As a basis for the discussion, the writer undertook, at the request of the APA's Publications Board, to analyze the multiple reviews in the four APA journals as to degree of favorableness or unfavorableness, and found a high correlation between the ratings of different reviews of the same book (Tables 8-11). As for CP's being a monopoly, that is true in so far as the APA is concerned, but there do exist psychological journals not published by the

TABLE 1  
JOURNALS SELECTED FOR ANALYSIS

APA (1953-55)	Non-APA (1956-57)
<i>Psychol. Bull.</i> . . . . .	<i>Amer. J. Psychol.</i>
<i>J. consult. Psychol.</i> . . . . .	<i>J. counsel. Psychol.</i>
<i>J. appl. Psychol.</i> . . . . .	<i>Personn. Psychol.</i>
<i>J. abnorm. soc. Psychol.</i> . . . . .	<i>Amer. J. Psychiat.</i> <sup>a</sup>
	<i>Educ. psychol. Measmt.</i> <sup>b</sup>

<sup>a</sup> The *Amer. J. Psychiat.* contains a large number of reviews in the fields of clinical and abnormal psychology, but only a few classifiable as social psychology. It thus does not extend over the entire range of the *J. abnorm. soc. Psychol.*, but the writer of this report was unable to discover another journal more nearly equivalent, nor could one of CP's Consultants in social psychology suggest an alternative.

<sup>b</sup> The *J. educ. Psychol.*, a possible equivalent to *Educ. psychol. Measmt.*, was not published by the APA in the years 1953-1955, and as a non-APA journal carried fewer reviews than *Educ. psychol. Measmt.* Now that it has been acquired by the APA it will, of course, cease to carry book reviews.

# EUGENICS QUARTERLY

## Editorial Board

FREDERICK OSBORN, *Chairman*  
GORDON ALLEN, M.D.  
C. NASH HERNDON, M.D.  
FRANK LORIMER  
HELEN HAMMONS, *Managing Editor*

Vol. 5 September, 1958 No. 3

## CONTENTS

The Relation of Human Genetics to Demography,  
JEAN SUTTER, M.D.

Darwin Revisited, HAROLD F. DORN

Changing Attitudes Toward Human Genetics and Eugenics, AMRAM SCHEINFELD

Birth Control in a Rural Area of Puerto Rico, WILSON M. WING, M.D., MATTHEW TAYBACK, CLARENCE J. GAMBLE, M.D.

Factors Operative in Mate Selection in a Philippine Village, ETHEL NURGE

## Book Reviews

## Periodical Reviews

Genetics, GORDON ALLEN, M.D., CHARLES M. WOLFF

Population, GEORGE F. MAIR

Published by

AMERICAN  
EUGENICS  
SOCIETY

230 Park Avenue, New York, N. Y.

Subscription, \$3.00 a year

Membership \$5.00 (foreign \$2.50)

APA. A study of five selected non-APA journals indicates that reviews alternative to those in *CP* may be found for many books in most fields of psychology (Tables 12-14).

## ANALYSIS OF REVIEWS

TABLE 1 gives the two groups of journals selected for comparison with *CP*, and Tables 2-5 analyze their contents and *CP*'s as to lengths and numbers of reviews, promptness of reviewing, and distribution among fields of psychology.

The five non-APA journals were selected on the basis of the listings in the *Mental Health Book Review Index* (5), Nos. 1-4, 1956-57. Four were chosen as corresponding fairly closely in field to the four APA journals, and as having the greatest number of citations in the MHBRI in their fields; the fifth had no APA equivalent, but was added to represent a field of psychology included in *CP*.

For the four APA journals, the years here considered are the last three in which they published book reviews, 1953, 1954, and 1955. For *CP* and for the five other journals, the years included are 1956 and 1957. It is questionable whether the reviews in the *Journal of Consulting Psychology* are fully comparable with those in the other journals. None of its reviews was more than 400 words long, and the average length was 165 words. Though these brief reviews are evaluative rather than

abstractive, an important element in *CP*'s definition of a review, the criticism they contain is necessarily of the capsule variety, and the average length of the reviews in all other journals considered was from 540 to 1400 words (Table 2). They have, however, been included in most of the tables, and where they have been omitted the fact is noted.

Of the 618 books reviewed in three years by the four APA journals (Table 3), 135 were reviewed two or more times, and subtraction of the duplications gives 461 different books reviewed. Of these, 103 received only the brief reviews in the *Journal of Consulting Psychology*. If they are included, APA book-reviewing from 1953 to 1955 was at the rate of approximately 150 books a year; if they are subtracted from the total, the rate was approximately 120 a year. *CP*'s two-year total of 547 does not include its own multiple reviews; the average number of books a year that it reviews is thus approximately 275. Subtracting duplications from the total of 585 for the non-APA journals gives 517 different books, or an average of about 260 a year.

In respect of promptness of reviewing *CP* ranks fourth among the ten journals, second among the APA journals (Table 4). If the *Journal of Consulting Psychology* is not considered, *CP* ranks third in all and first in the APA. *CP*'s fairly large percentage (21.0%) of

TABLE 2  
LENGTH OF REVIEWS

	No. reviews*	Total words	Av. words per review
<i>Psychol. Bull.</i>	196	176,800	900
<i>J. consult. Psychol.</i>	194	32,400	165
<i>J. appl. Psychol.</i>	94	50,700	540
<i>J. abnorm. soc. Psychol.</i>	59 543	82,000 341,900	1400
<i>Contemp. Psychol.</i>	448 448	387,700 387,700	865
<i>Amer. J. Psychiat.</i>	222	123,200	550
<i>Personn. Psychol.</i>	100	56,000	560
<i>J. counsel. Psychol.</i>	43	49,000	1140
<i>Amer. J. Psychol.</i>	83	59,000	700
<i>Educ. psychol. Measmt</i>	74 522	56,400 343,600	760

\* Number of reviews is less than number of books reviewed (Table 3). Most journals had some reviews that covered two or more books.

TABLE 3  
NUMBER OF BOOKS REVIEWED

	1953	1954	1955	Total	Av.
<i>Psychol. Bull.</i>	54	74	130	258	86
<i>J. consult. Psychol.</i>	63	75	58	196	65
<i>J. appl. Psychol.</i>	36	32	32	100	33
<i>J. abnorm. soc. Psychol.</i>	24	14	26	64	21
	1956	1957			
<i>Contemp. Psychol.</i>	278	269	547	547	274
<i>Amer. J. Psychiat.</i>	114	109	223		112
<i>Personn. Psychol.</i>	49	53	102		51
<i>J. counsel. Psychol.</i>	54	44	98		49
<i>Amer. J. Psychol.</i>	41	47	88		44
<i>Educ. psychol. Measmt</i>	34	40	74	585*	37

\* Includes all books reviewed by each journal, whether or not reviewed by any other journal also.

TABLE 4  
PROMPTNESS OF REVIEWING

	Percentage of books reviewed in:		
	Year of publication <sup>a</sup>	Year following publication	2 or more years after publication
<i>J. consult. Psychol.</i> <sup>b</sup>	49.0	49.0	2.0
<i>J. counsel. Psychol.</i>	38.8	55.1	6.1
<i>Personn. Psychol.</i>	24.5	62.7	12.8
<i>Contemp. Psychol.</i>	21.0	58.0	21.0
<i>Educ. psychol. Measmt</i>	17.6	51.3	31.1
<i>Amer. J. Psychol.</i>	16.0	54.5	29.5
<i>Amer. J. Psychiat.</i>	8.1	54.7	37.2
<i>J. appl. Psychol.</i>	6.0	66.0	28.0
<i>J. abnorm. soc. Psychol.</i>	4.7	67.3	28.0
<i>Psychol. Bull.</i>	3.5	72.0	24.5

<sup>a</sup> The percentages for year of publication cannot be 100%. A book published in December cannot be reviewed in the same December. Even if reviewed immediately from proof sheets, printer's lag would make immediate publication impossible.

<sup>b</sup> The *J. consult. Psychol.* is exceptional. It was extraordinarily prompt in its reviewing because its reviews were brief and were prepared by members of its staff.

books reviewed two or more years after publication should decrease in future: its inheritance of a number of 1954 or earlier books from other APA journals weighted the figures in this direction. *CP* does not promise that it will review substantially more books in the year of their publication but believes that it will review very few more than one year old.

Examination of Table 5 shows that, with the exceptions mentioned in the footnotes, *CP*'s coverage in 1956-57

was distributed not very differently from that of the other APA journals in 1953-55. Nor do the percentages for the non-APA journals differ very much from *CP*'s. True, these five journals were chosen to correspond in field to the APA journals and to *CP*, and the fact that they correspond so closely in coverage may signify only the accuracy of the choice. It seems likely, however, that the figures are also indicative of *CP*'s success in carrying out its mandate.

## Recently Published

# CONTRIBUTIONS TO MODERN PSYCHOLOGY:

## Selected Readings in General Psychology

Edited by DON E. DULANY, JR.,  
University of Illinois; RUSSELL  
L. DeVALOIS, University of  
Michigan; DAVID C. BEARDS-  
LEE, Wesleyan University; and  
MARIAN R. WINTERBOT-  
TOM, Connecticut College.

CONTRIBUTIONS TO MOD-  
ERN PSYCHOLOGY presents in a  
single accessible volume a set of  
basic experimental reports and case  
studies, intended to serve as supple-  
mentary reading for the introducto-  
ry psychology course. Its pur-  
pose is to provide the detailed view  
of research in psychology that can-  
not be gained from the more general  
discussions in textbooks and lec-  
tures. The student will find these  
first-hand reports of original studies  
challenging and exciting; and his  
appreciation of the course will be  
enriched by knowledge of how the  
psychologist as investigator works.  
416 pages. Illustrated. \$3.25

# MEASUREMENT AND STATISTICS:

## A Basic Text with Behavioral Science Applications

By VIRGINIA L. SENDERS,  
University of Minnesota

The theory of scaling and mea-  
surement provides the framework  
within which the basic concepts of  
descriptive and inferential statistics  
are presented. Although no mathe-  
matical knowledge beyond high  
school algebra is required of the  
student, logic and understanding of  
basic principles, rather than tech-  
niques of calculation, are stressed  
throughout the text. Emphasis is  
placed on the necessity of using the  
statistical techniques appropriate to  
any given measurement model. 549  
pages. Illustrated. \$6.00

OXFORD UNIVERSITY PRESS

417 FIFTH AVENUE,  
NEW YORK 16, N. Y.

TABLE 5  
REVIEWING ACCORDING TO FIELD OF PSYCHOLOGY

Fields <sup>a</sup>	Number of Books				Percentage		
	APA	Adjusted APA <sup>b</sup>	CP	Non-APA	APA	CP	Non-APA
1. General Theory & systems, methods & apparatus, new tests, statistics, reference works, organizations, history & biography, professional problems, films	71	47	129	95	15.4	23.5	18.4 <sup>c</sup>
2. Physiological Psychology, Receptive and Perceptual Processes, Response Processes Nervous system, vision, audition	27	18	33	41	5.8	6.0	8.0
3. Complex Processes and Organizations Learning & memory, thinking & imagination, intelligence, personality, esthetics	51	34	39	35	11.1	7.1	6.8 <sup>d</sup>
4. Developmental Psychology Childhood & adolescence, maturity & old age	37	24	22	13	8.0	4.0	2.5 <sup>e</sup>
5. Social Psychology Methods & measurement, cultures & cultural relations, social institutions, language & communication	45	30	109	56	9.8	20.1	10.8 <sup>f</sup>
6. Clinical Psychology, Guidance, Counseling, Behavior Deviations Methodology, techniques, diagnosis & evaluation, treatment methods, child guidance, vocational guidance, mental deficiency, behavior problems, speech disorders, crime & delinquency, psychoses, psychoneuroses, psychosomatics, clinical neurology, physically handicapped	145	97	127	164	31.5 <sup>g</sup>	23.1	31.7
7. Educational Psychology School learning, interests, attitudes & habits, special education, educational guidance, educational measurement, education staff personnel	32	22	50	54	6.9	9.3	10.4
8. Personnel Psychology, Industrial and Other Applications Selection & placement, labor-management relations, industry, business & commerce, professions	53	36	38	59	11.5	6.9	11.4 <sup>h</sup>
	461 <sup>i</sup>	308	547	517 <sup>i</sup>	100.0	100.0	100.0
Per annum	—	154	274	259	—	—	—

<sup>a</sup> Fields as given by *Psychol. Abstr.*, but reduced by grouping from 12 to 8 for the purposes of this table. Original analysis was on the basis of 18 subject headings, *Psychol. Abstr.*'s principal fields plus their subdivisions of Statistics, Learning & memory, Thinking & imagination, Intelligence, Personality, Esthetics, and Language & communication.

<sup>b</sup> Column 1 gives the total for three years, 1953-55; column 2 the average for two years to permit direct comparison with the two-year totals for CP and for the five non-APA journals, as given in columns 3 and 4.

<sup>c</sup> CP's scope is broader than either the APA journals', including *Psychol. Abstr.*, or the non-APA journals'. A number of books reviewed in CP were so general as to be outside the field of psychology entirely, although considered to be of interest to psychologists.

<sup>d</sup> Percentages for APA journals, CP, and non-APA journals were approximately equal for the subdivisions of this category, except for Personality, where the percentages were: APA, 7.2; CP, 2.7; non-APA, 3.3. Excluding the very brief reviews in the *J. consult. Psychol.*, APA's percentage was 6.3. CP assumes that fewer books on personality were published in 1956-57 than in 1953-55.

<sup>e</sup> CP reviewed comparatively few books on Developmental Psychology in 1957, but a long review of 11 books in this field appeared in May 1958 (CP, 3, 132-139). It covered most of the output for 1957, and, if included in these figures, would mean that CP is giving approximately as complete coverage (6%) as was given by the APA journals in 1953-55 (8%). None of the non-APA journals considered here reviewed many books in this field; possibly some other non-APA journal gives fuller coverage.

<sup>f</sup> CP's coverage of books in Social Psychology appears to be substantially better than that by the four other APA journals. A possible explanation is that *Psychol. Bull.* reviewed comparatively few books in this field, while *J. abnorm. soc. Psychol.* reviewed few books altogether and therefore only the most important ones in this one field. CP's coverage is also fuller than that by the five non-APA journals (see footnote a, Table 1).

<sup>g</sup> If books on counseling and guidance reviewed only in the *J. consult. Psychol.* are omitted, the figure becomes APA, 23.7%, as against CP's 23.1%. The APA journals' coverage, where it differed from CP's, was therefore in the form of very brief reviews. Among the non-APA journals, the *Amer. J. Psychiat.* naturally contributed heavily to this field's 31.7%; 116 out of 223 books reviewed, or 51.9%, fell in this category. *J. consult. Psychol.*'s percentage was 37.1. CP's coverage corresponds most closely to that of the *Amer. J. Psychol.*, CP, 23.1%, *Amer. J. Psychol.*, 22.7%, *Personn. Psychol.* and *Educ. psychol. Measmt* gave 11.8% and 10.8% respectively.

<sup>h</sup> Psychologists in Personnel Psychology, Industrial and Other Applications seem to be receiving less coverage than they did previously, mainly in the *J. appl. Psychol.* Currently, *Personn. Psychol.* also gives better coverage than does CP.

<sup>i</sup> N = number of different books reviewed by APA and non-APA journals, respectively, excluding duplicate reviews.

#### MULTIPLE REVIEWING IN THE FOUR APA JOURNALS

MULTIPLE reviewing has indeed declined markedly since the advent of CP

(Tables 6 and 7). In response to complaints that there is now not enough multiple reviewing, the Editor has pointed out some of the difficulties involved and some of the arguments

against it (CP, Oct. 1956, 1, 303; Aug. 1957, 2, 210f.). Chief among them is the question of redundancy, and to throw some light on this problem, the writer of this report undertook to ana-



TABLE 6  
BOOKS RECEIVING TWO OR MORE  
REVIEWS IN CP

No. Books	No. Reviews Each
7	2
1	3
1	6*
9	

\* CP, Jan. 1956, 1, 3-11. This was perhaps a six-part review rather than six reviews of one book.

TABLE 7  
BOOKS RECEIVING TWO OR MORE REVIEWS  
IN FOUR APA JOURNALS

No. Books	No. Reviews Each	No. Journals
1	2	1
112	2	2
20	3	3
1	4	3
1	5	4
135		

TABLE 8  
RATINGS OF MULTIPLE REVIEWS

Rating	N	Percentage
1	137	46.5
2	103	34.9
3	29	9.8
4	26	8.8
	295	100.0

lyze further the reviews cited in Table 7.

A four-point scale was used for rating the reviews:

- 1: favorable
- 2: more favorable than unfavorable
- 3: more unfavorable than favorable
- 4: unfavorable.

The 295 reviews of the 135 books were rated as shown in Table 8. An overwhelming 81.4 per cent of these reviews are thus favorable or mostly favorable, and the likelihood is that many of the books which would receive un-

favorable reviews are simply not reviewed at all—or perhaps not even published. It is also possible that most of the books considered worthy of review by two or more journals are *ipso facto* good books. (Would a supremely bad book be reviewed by several journals? Perhaps, if it were by an important author.) Time did not permit a similar rating of single reviews to discover whether the percentages differed greatly, but the writer has the impression that, while the multiply reviewed books tended to be relatively important ones, they also tended to be those which overlapped fields. A book on projective tests, for example, might have been reviewed by the *Psychological Bulletin*, the *Journal of Abnormal and Social Psychology*, and the *Journal of Consulting Psychology*, while an important book on perception, on the other hand, would probably have been reviewed only in the *Psychological Bulletin*.

The similarity between the reviews of books in two journals is shown in Table 9, and in three journals in Table 10.

Thus Table 9 shows that 47.8 per cent of the double reviews received identical ratings, and 86.7 per cent differed by no more than one rating point; the remainder of these reviews, 13.3 per cent, differed by two or three rating points.

Table 10, similarly, gives the percentages for the ratings of the triple reviews: in 20.0 per cent of the cases all three ratings were identical, and in an additional 50.0 per cent one rating differed by one point. In the remaining 30.0 per cent there was a two-point difference.

The ratings of the one book receiving four reviews and the one receiving five differed by no more than one rating point: 1, 1, 1, 2 and 1, 2, 2, 2, 2.

A chi-square analysis was performed, omitting the four-review and five-review books, and combining the three-review books with the two-review by considering them as three pairs of double reviews (Table 11).

There is thus a high positive correlation between the rating of one review of a book and the rating of a second; the large proportion of 1-1 reviews contributes strongly to the chi square. There is a suggestion, although

not a strong one because of the small number of reviews involved, that the extremely unfavorable reviews, those rated 4, are somewhat idiosyncratic. This possibility appears also in the following tabulation:

First rating = 1, mean second rating = 1.48	
2	1.93
3	2.43
4	2.42

The mean review is rated 1.82.

What are the policy implications of these data for CP? It seems clear that any great increase in the number of prearranged double reviews would result in a high degree of redundancy. Some highly unfavorable reviews appear to be

TABLE 9  
COMPARISON OF DOUBLE REVIEWS

Paired ratings	N	Percentage
1-1	35	30.9
2-2	16	14.2
3-3	1	.9
4-4	2	1.8 (47.8)
1-2	27	23.9
2-3	11	9.7
3-4	6	5.3 (86.7)
1-3	3	2.7
2-4	6	5.3
1-4	6	5.3
	113	100.0

TABLE 10  
COMPARISON OF TRIPLE REVIEWS

Triple ratings	N	Percentage
1-1-1	3	15.0
2-2-2	1	5.0 (20.0)
1-1-2	6	30.0
2-2-1	3	15.0
3-3-2	1	5.0 (70.0)
4-4-2	1	5.0
1-2-3	3	15.0
2-3-4	2	10.0
	20	100.0

TABLE 11\*  
DOUBLE AND TRIPLE RATINGS COMBINED

Rating	N
1-1	85
1-2	75
1-3	9
1-4	12
2-2	38
2-3	29
2-4	16
3-3	3
3-4	14
4-4	5
	286

$$\chi^2 = 52.40, p = <.01$$

\* Based on Table 8, with the books receiving four and five reviews omitted.

idiosyncratic, but *CP* feels that it would be unwise to undertake to obtain a second review in every case where a book has received an initial unfavorable one. Promptness of reviewing is important, and such a procedure would entail a delay of two or three months. (*CP* ought to hold the first one for the second, ought it not?) More important, these second thoughts could hardly be unbiased ones. A Consultant has already expressed his confidence in the original reviewer by recommending him, and *CP* would hesitate to impugn its Consultant's judgment by asking him to reconsider. Would he, in picking a second reviewer, be biased toward confirming the first? Should *CP* print two unfavorable reviews, when the second was undertaken merely because the first was unfavorable? An author would be even more dissatisfied with two rebuffs than with one. On the other hand, *CP*, whose reviewers are not paid for their labors, might not care to ask for a second review and then not print it.

It is difficult, moreover, for the Editor to decide whether a review is highly unfavorable or not, especially in terms of how it will impress the author. Among the reviews most bitterly resented by 'Injured Authors' (*CP*, Apr. 1958, 3, 93f.) and obviously rated by them as 4, there are several which would have been rated on the present scale as 2 or even 1.

*CP* considers itself as a forum for the expression of opinion, not as a judge pronouncing sentence or arriving at a verdict by the vote of a jury. The proper corrective for the inevitable idiosyncrasies of judgment would seem to be not further multiplication of reviewing, but increased use of the pages of *ON THE OTHER HAND*, *CP*'s department of letters.

#### MULTIPLE REVIEWING IN *CP* AND THE NON-APA JOURNALS

ANALYSIS of the books reviewed in *CP* and the five non-APA journals for 1956-57 shows that, of a grand total of 885 different books reviewed in all, 189 books received two or more reviews (Table 12).

TABLE 12  
BOOKS RECEIVING TWO OR MORE REVIEWS  
IN *CP* AND FIVE NON-APA JOURNALS

No. Books	No. Reviews Each	No. Journals
12	2	1
128	2	2
1	3	1
5	3	2
32	3	3
4	4	3
3	4	4
1	5	3
1	5	4
1	6*	1
1	7	5
189		

\* *CP*, Jan. 1956, 1, 3-11. This was perhaps a six-part review rather than six reviews of one book.

Twelve of the 189 were reviewed twice in a single journal, one three times, and one six times (or in six parts: see footnote to Table 12), and in no other journal. Of the remaining 175, *CP* and one or more of the other journals reviewed 156, and 19 were reviewed by two or more other journals and not by *CP*. (One book—*The Psychology of Occupations*, by Anne Roe—was reviewed in four of the five non-APA journals, all except the *American Journal of Psychiatry*, with three reviews in the *Journal of Counseling Psychology*.

It was also reviewed in *CP*, making seven reviews in all.) *CP* reviewed, actually, 30 per cent of the total number of different books reviewed by the five—156 out of 517—and the five together reviewed 28.5 per cent of the books reviewed by *CP*, 156 out of 547.

Perhaps one would have expected these percentages of total overlap to be higher, but it should be noted that every journal reviews some books which are on the periphery of psychology. The *American Journal of Psychiatry*, for example, reviewed a number which might be considered more medical than psychological (though for the purposes of the present analysis they were classified as Clinical Psychology or Behavior Deviations); *Personnel Psychology* sometimes crosses the border into industrial sociology or economics (such books were assigned to Industrial and Other Applications), and *CP* sometimes reviews books (here classified as General) clearly outside psychology but considered to be of interest to psychologists, scientists, or academicians per se. In addition, some multiply reviewed books may fall in part outside the time-limits of this study: a book reviewed in *CP* in 1956 may have been reviewed in one of the other journals in 1955, or a book reviewed in another journal in 1957 may appear in *CP* in 1958.

If *CP* is excluded from consideration, 60 books were reviewed by two or more of the five non-APA journals. The greatest amount of overlap was thus between *CP* and the five other journals, as one would expect from the manner in which they were selected, with comparatively little overlap from one to another within the group of five (Tables 13 and 14).

Table 13 shows the numbers of books reviewed by each journal as paired with itself as well as with every other journal. In Table 14, overlap between each pair of journals is expressed as the percentage of total books reviewed, e.g., *CP* reviewed 1.7 per cent of its own books more than once; it reviewed 50, or 22.4 per cent of the 223 books reviewed by the *American Journal of Psychiatry* (Table 3), and the *American Journal of Psychiatry* reviewed 50, or 9.1 per cent of the 547 books reviewed by *CP*, and so on throughout the table.

TABLE 13

MULTIPLE REVIEWING IN *CP* AND FIVE NON-APA JOURNALS: NUMBER OF BOOKS

	<i>Contemp. Psychol.</i>	<i>Amer. J. Psychiat.</i>	<i>Personn. Psychol.</i>	<i>J. counsel. Psychol.</i>	<i>Amer. J. Psychol.</i>	<i>Educ. psychol. Measmt</i>
<i>Contemp. Psychol.</i>	9	50	36	38	44	32
<i>Amer. J. Psychiat.</i>		2	—	8	10	1
<i>Personn. Psychol.</i>			—	14	9	8
<i>J. counsel. Psychol.</i>				12	9	12
<i>Amer. J. Psychol.</i>					—	7
<i>Educ. psychol. Measmt</i>						3

TABLE 14

MULTIPLE REVIEWING IN *CP* AND FIVE NON-APA JOURNALS: PERCENTAGE OF OVERLAP

	<i>Contemp. Psychol.</i>	<i>Amer. J. Psychiat.</i>	<i>Personn. Psychol.</i>	<i>J. counsel. Psychol.</i>	<i>Amer. J. Psychol.</i>	<i>Educ. psychol. Measmt</i>
<i>Contemp. Psychol.</i>	1.7	22.4	35.3	38.8	50.0	43.2
<i>Amer. J. Psychiat.</i>	9.1	.9	—	8.2	11.4	1.4
<i>Personn. Psychol.</i>	6.6	—	—	14.3	10.2	10.8
<i>J. counsel. Psychol.</i>	7.0	3.6	10.8	12.2	10.2	16.2
<i>Amer. J. Psychol.</i>	8.0	4.5	8.8	9.2	—	9.6
<i>Educ. psychol. Measmt</i>	5.9	.5	7.8	12.2	8.0	4.1

There is, however, a qualitative difference which cannot be shown in a table: *CP*'s reviews are on the whole less technical than those formerly in the APA journals or those in the non-APA journals. The Editor has, in fact, made it a matter of policy that *CP*'s reviews, in whatever fields the books fall, should be as intelligible as possible to readers in all fields. A correspondent has commented that, while he reads *CP* for broad coverage, he finds it necessary to supplement it by reading the more technical reviews in a non-APA journal in his own field. Tables 12-14, and also Table 5, suggest that there are alternatives to *CP* for readers in most fields of psychology, both for those in search of technical reviews and for those in search of 'justice' through multiple reviewing, and the *Mental Health Book Review Index* (5) provides convenient reference to reviews of specific books in these and many other psychological journals.

#### IN CONCLUSION

MUCH of *CP*'s functioning has now been described in cold figures. This report presents tables showing how many

books *CP* has reviewed, how much space it has devoted to them, how promptly the reviews have appeared, how they were distributed over the various fields of psychology. It attempts to show that multiple reviewing tends to be redundant, but that alternative reviews to *CP*'s exist in a number of non-APA journals.

One more question may be raised. Before *CP*'s launching, the proponents of a book-review journal argued that it would provide greater convenience for readers by concentrating reviews in one place, and that readers would thus have easy access to reviews in allied fields as well as in their own. Its opponents retorted that, on the contrary, readers

would be obliged to receive, and to pay for, large numbers of reviews in which they were not interested (2, 4, 6). *CP* can now say that, among its numerous correspondents, many uphold the side of comprehensiveness and few (none recently) have favored specialism. *CP* can even suspect in itself a merit greater than convenience. As psychology grows and grows and proliferates into more and more specialized fields, *CP*'s broad coverage and its less technical style may turn out to be its most valuable characteristics. *CP* has already heard from two young specialists who remarked that, until *CP* came along, they had not known what psychology as a whole is. Will not *CP* contribute to the unity of modern psychology?

#### REFERENCES

1. F. H. SANFORD. Across the secretary's desk. *Amer. Psychologist*, 1955, 10, 308-10.
2. EDWARD GIRDEN and WAYNE DENNIS. Book reviewing in American psychological journals. *Amer. Psychologist*, 1954, 9, 251-3.
3. L. J. CRONBACH, P. R. FARNSWORTH, and LORRAINE BOUTHILET. The APA publications program: status and prospects, 1955. *Amer. Psychologist*, 1955, 10, 110-120, esp. 119.
4. F. H. SANFORD. Across the secretary's desk. *Amer. Psychologist*, 1954, 9, 37-40, esp. 39f.
5. *Mental Health Book Review Index*, Nos. 1-6, published as semiannual Supplements to *Psychol. Newsltr*, 1956, 7, 3, 6; 1957, 8, 3, 6; 1958, 9, 3, 6. Beginning in January 1959, the *MHBRI* will become an independent publication. Subscriptions (\$3.00 a year) may be entered with Miss Lois Afflerbach, Paul Klapper Library, Queens College, Flushing 67, N. Y.
6. E. K. TAYLOR. Comment on the proposed book review journal. *Amer. Psychologist*, 1955, 10, 131f.



Yet I want to suggest that some of the principles of newspaper and advertising writing be applied to technical writing, even to the articles in journals of original publication. How novel it would be to read in the beginning of the article what has been found! What would the technical person think if newspapers wrote their stories the way his journals are written? Is the form of technical presentation a bit of unconscious snobbery? It is prestigious to be difficult to understand, just as some doctors still write prescriptions in Latin.

—WATSON DAVIS

# Difficulty in Reading: Two Treatments

M. D. Vernon

*Backwardness in Reading: A Study of its Nature and Origin.* New York: Cambridge University Press, 1957. Pp. viii + 228. \$4.75.

Maurice D. Woolf and Jeanne A. Woolf

*Remedial Reading: Teaching and Treatment.* New York: McGraw-Hill, 1957. Pp. viii + 424. \$5.75.

Reviewed by RUTH STRANG

Dr. Strang is Professor of Education in charge of the High School and College Reading Center at Teachers College, Columbia University. She has been interested in difficulty in learning to read ever since she was involved in teaching reading to deaf-and-dumb children about 1924. She has published *Exploration in Reading Patterns* (Univ. Chicago Press, 1942), which cites her Time-Life study of adults' interest in reading and their comprehension of what they read. With Constance McCullough and Arthur Traxler, she is author of *Problems in the Improvement of Reading* (McGraw-Hill, 1955) and with Dorothy Bracken of *Making Better Readers* (Heath, 1957). With other collaborators she has prepared six books of short modern stories (Heath) that adolescents, retarded in reading, can read with enjoyment, without frustration or intensification of their sense of failure.

THE contrasts between these books invite a joint review rather than two separate reviews.

First, the backgrounds of the authors of the two books are quite different. Dr. M. D. Vernon is Professor of Psychology, University of Reading, England. Her long-standing interest in research in reading is indicated by her *Experimental Study of Reading* published in 1931. In spite of her seniority, she has main-

tained contact with the children themselves through her work in schools and child-guidance clinics.

In contrast, Dr. Maurice D. Woolf is Professor of Education, Kansas State College. He and Jeanne Woolf approach reading from a guidance background. In 1953 they published jointly a book on *The Student Personnel Program*. Much of the content of their book on reading has come from their classes and clinical work.

Second, the publishers of both books hope to reach a wide audience—parents and teachers as well as college and university students and clinical workers. For most parents and teachers the Vernon book is, however, too technical. On the other hand, for students of psychology and clinical workers, the Woolf book would seem too superficial; for example, three of its pages are devoted to the Rorschach test, inviting interpretation on the basis of specific responses: "‘Eyes looking at me’ is said to be a typical paranoid reaction" (p. 129).

THIRD, a marked difference between the two books lies in their relative emphasis on theory and practice—on 'what to think' as contrasted with 'what to do.'

Dr. Vernon clearly states her aim as follows: "to make a thorough and de-

tailed study of the investigations that have been made; and to present and to weigh up the evidence as to the importance of the various factors which appear to be associated with the inability to learn to read" (p. 7). This the author has consistently and systematically attempted to do, notably in the treatment of the controversial subjects of congenital word-blindness and cerebral dominance, to which she devotes 32 pages. In conclusion, she agrees that there are cases who have no well-established laterality, "and in addition exhibit speech and other motor disorders, temperamental instability and reading disability. This condition may be hereditary. . . . But clearly such cases form a small minority of all the cases of reading disability" (p. 109).

The Woolfs' stated aim is to present philosophy, theory, and techniques, but they devote the major part of the book to descriptions of tests and techniques of work with individual cases and with groups of retarded readers. The illustrative materials include verbatim class discussion, recorded interviews, lists of reading materials, evaluation through test results, and reports of in-service education. They present remedial reading more as a group work and counseling problem than as a problem of analyzing the breakdown in any stage of the process of learning to read. In Dr. Vernon's book the technical nature of teaching reading is emphasized; in the Woolfs', remedial reading is presented as a counseling problem.

FOURTH, both books refer briefly to a large number of studies. In neither is there much specific critical analysis of research methods, indication of the relative importance of the studies cited, or detail of the procedures by which the results reported were obtained.

Dr. Vernon, however, has made a much more thorough canvass of the research on reading and has extracted the most significant findings more systematically and critically than have the authors of the other book. For example, she occasionally points out such defects in the research design and methodology as inaccurately controlled observations, other uncontrolled variables that may



have produced the improvement attributed to a particular method, attempted application of results obtained with older children or adults to a different population (as for example to beginning readers), and generalization from results of artificial laboratory experiments applied to an ordinary reading situation. Much of the tedious inconclusiveness of the results of the research reported is due to small diverse samplings, uncontrolled variables, different methods of investigation, and too sweeping generalizations and conclusions.

In the Vernon book, slightly more than three-fourths of the approximately four hundred references mentioned were published eight or more years ago. This paucity of recent research on the reading process is a reflection on the field rather than a criticism of the author. Although thousands of articles on reading have been published during the past ten years, there have been relatively few reports of basic research on the reading process.

Particularly helpful in the Vernon book are the thoughtfully considered summaries following the review of a number of studies of the same problem. For example, at the end of Chapter VII the controversial question on phonetics is neatly summed up as follows: "The first essential is to stimulate the children's interest in the reading process; and . . . some form of look-and-say method, accompanied by various reading 'games' is the best for this purpose. But after the child has acquired some familiarity with reading material, and has learnt to recognize a certain number of words as wholes, he must proceed to some form of phonetic analysis if he is to acquire an adequate knowledge of the mechanics of reading" (pp. 173f.).

FINALLY, the two books are very different in their scope and focus. Dr. Vernon's *Backwardness in Reading* is focused on the reading process and the references reviewed are directly relevant to this topic. It throws light on many important and controversial questions about reading. On the other hand, the Woolfs' *Remedial Reading: Teaching and Treatment* goes quite far afield from reading per se into many aspects

of psychology, counseling, and psychotherapy. Frequently application to reading of the studies cited is not made. To delve deeply into theories of learning, perception, personality, child-care practices, client-centered therapy, mental

hygiene, emotion, and other psychological aspects and to relate these theories to the reading process would be a tremendous task, which can only be accomplished superficially in a general practical book on remedial reading.

## Conviction and Evidence: Fusion or Fission?

James H. VanderVeldt and Robert P. Odenwald

*Psychiatry and Catholicism.* (2nd ed.) New York: McGraw-Hill, 1957. Pp. ix + 474. \$8.00.

Reviewed by MAGDA B. ARNOLD

*Dr. Arnold, who hails from Toronto (PhD 1942), has come by way of Wellesley, Bryn Mawr, and Barat Colleges to be, since 1954, Professor of Psychology at Loyola University in Chicago. She has for the last half dozen years been hard at work on a book on Emotion and has used up two Radcliffe fellowships and one Guggenheim on it. She is active in intellectual Catholic affairs and dislikes "the currently fashionable materialistic deterministic philosophy as the only basis possible for science." She thinks she knows an alternative, but it is not substituting authority for evidence. Read on and see.*

THIS much enlarged new edition of a book first published in 1952 is the work of the Rev. J. H. VanderVeldt, who earned his doctorate at the University of Louvain three decades ago and has been for the last decade Professor of Psychology in Catholic University in Washington, D. C., and Dr. Robert P. Odenwald, who used to be Assistant Professor of Psychiatry and Director of the Child Center in Catholic University and is now a psychiatrist in private practice.

The preface of the book sets its goal: to provide a synthesis of psychiatry and Christian ethics. At first glance it seems curious to juxtapose in this way a scientific discipline and a system of revealed doctrine (Catholicism); but on reflection there appears an area of over-

lap—of potential clash—between the two. Both psychiatry and Catholicism are concerned with human nature, the one to straighten out its kinks, the other to develop it for a supernatural destiny. Psychiatry sees human nature hampered by difficulties, beset by conflicts to which the demands of religion often contribute, and tries to adjust man to life here and now. Christianity cannot accept an adjustment that buys mental health at the price of a man's soul.

The authors try to reconcile these differences by pointing out that psychiatric techniques, being the outcome of scientific discoveries, can be used, even though psychiatric theories may be based on an invalid view of man's nature. Yet they neither convince the reader that psychiatric techniques are scientifically valid nor that the Catholic view of human nature ought to take precedence over the current naturalistic view. They merely confront psychiatry as a body of doctrine with another body of doctrine, Catholicism. Instead of demonstrating the evidence upon which psychiatric theory or technique is based, they keep appealing to the opinion of various writers in the field until the reader may begin to suspect that opinions are formed and discarded in psychiatry without rhyme or reason. Similarly, they refer to statements of theologians or of the Pope without making clear on what evidence they

are based. Thus the reader untrained in philosophy may come to think that these authorities impose their views by fiat on a credulous people. One might wish that the authors had had the courage of a Thomas Aquinas who quoted every authority of his day on the problem to be discussed and finally demonstrated his own conclusion in a closely reasoned argument beginning: "I answer that. . . ."

**A**LAS, the procedure of VanderVeldt and Odenwald is very different. Particularly in the psychiatric chapters, they may briefly describe a theory or technique, next cite some contrary views, and finally, without any attempt at assessing the pros and cons, let the pros have it. To give only two examples:

In Chapter 4 it is stated that "a common theory" or "some writers" hold a genetic (psychoanalytic) view of the origin of psychosomatic gastric disturbances. Next the authors refer to evidence that seems contradictory (that the number of ulcer perforations greatly increased during air raids); and finally, without attempting to reconcile fact and theory, they blandly use the theory for further interpretation, as if it had been fully substantiated.

In Chapter 16, the authors discuss personality tests and describe questionnaire and rating-scale methods. They point out that questionnaires can be faked and that rating scales give few if any clues to the inner dynamics of personality. Yet they conclude: "If a personality test could be given to all school children . . . many mental disorders might be averted." One may agree with the sentiment but wish for a better reason for doing so.

There is a similar appeal to ecclesiastic authority without discussion of why and wherefore. For instance, the authors discuss the limits of therapeutic exploration and quote a statement of Pope Pius XII to the effect that "man is not free to arouse in himself, for therapeutic purposes, each and every appetite of a sexual order." Instead of discussing the nature of such 'abreaction' or 'working through' and its effect on patient and therapist, thus making the reasons for the objection under-

standable, the authors simply quote and expect the reader to supply the reasons himself—which is precisely what he cannot do unless he is familiar with the underlying philosophy and theology of human nature.

Among psychiatric theories, understandably enough, psychoanalysis takes the lion's share. Here the authors do try to evaluate and discuss. They claim that Freud's theory implies a philosophy "which gradually has been tacked on to the psychoanalytic therapeutic technique" (p. 153) and insist that the theory can be cleanly separated from the technique because "Freud achieved results before he had constructed his *Weltanschauung*." Freud's philosophy is materialistic, hedonistic, hence in conflict with religiously oriented convictions; but the technique, they say, is philosophically neutral. Perhaps they are right, but we would wish the authors had given some hint how the technique can be separated from the theory. That it is not easy is attested by the fact that Catholic analysts have not as yet worked out a system that would replace Freud's theory yet leave his technique untouched. Such as it is, Freud's system is as consistent as many years of unremitting labor could make it. If there is a valid objection either to his philosophy or the psychological theories that explain his observations and bring them into harmony with his convictions, perhaps we may have to rebuild from the ground up. At any rate, VanderVeldt and Odenwald seem to entertain doubts about the "clean separation" of theory and technique as they go on. In later chapters, they find that "Freudianism is despite its pretense of neutrality [in the analytic situation] a hedonistic system" and thus they complain that "Freudian psychoanalysis smuggles into psychological theories and therapy philosophical principles unacceptable to Catholic faith" (p. 233, emphasis added).

**W**HEN it comes to psychoanalytic technique, as distinct from Freud's philosophy, the authors say that it has to be evaluated on strictly scientific grounds. The technique is claimed, they note, to be insufficient because it is a

"passive release" or "exposure technique." Apparently "some writers" insist that Freud advocated the exclusive use of this exposure technique while others deny it (p. 197). Again the authors give us neither the names of these writers nor the reasons for their opinions; yet the argument proceeds as if it had now been proved that Freud's technique is a passive release. Freud's own writings on the use of identification with the therapist in motivating the patient surely could settle this point. (A similar misinterpretation occurs when Rogers' client-centered therapy is accused of "operating on the Freudian emotional-release principle," p. 280.)

**T**HE chapters on mental disorder do not cover the field as adequately as might be wished, though they are a decided improvement on the same chapters in the first edition. It is a little surprising, however, to find a case of split personality described under the category of *simple schizophrenia* or to hear that the wetting and self-soiling of some schizophrenics may confirm the regressive origin of schizophrenia (p. 289). The notion that hysteria is a regression to a childish attitude is accepted because it explains many hysterical reactions. And perhaps it does, but how good is an explanation by analogy, particularly when the same analogy applies to both schizophrenia and hysteria without accounting for the differences between them?

On the credit side, the book provides an excellent survey of Catholic moral theology as it applies to the area of human nature that is relevant to psychiatry. It can be helpful to the psychiatrist who would like to explore the intellectual and spiritual climate of his Catholic patients; it may open the way to a fruitful collaboration of priest and psychiatrist; and it may encourage Catholic priests and laymen to become more familiar with the sciences that may help them toward a better understanding of people and their problems.



*As you judge yourself, so shall you judge others.*

—HARRY STACK SULLIVAN

# Gerontology's Past Master

Nathan W. Shock

*Trends in Gerontology* (2nd ed.) Stanford: Stanford University Press, 1957. Pp. viii + 214. \$4.50.

*A Classified Bibliography of Gerontology and Geriatrics: Supplement One, 1949-1955.* Stanford: Stanford University Press, 1957. Pp. xxviii + 525. \$15.00.

Reviewed by A. T. WELFORD

Dr. Welford is at present Fellow and Tutor in St. John's College in Cambridge, England, and University Lecturer in Experimental Psychology at the University. After World War II and a year at Princeton in the United States, he directed the Nuffield Research into the Problems of Ageing, which from 1946 to 1956 was attached to the Cambridge Psychological Laboratory. In recent years he has been chairman of the Council of the Ergonomics Research Society and now he is becoming editor of the new journal *Ergonomics* (CP, August 1958, 3, 220).

FUTURE generations studying aging in countries where they play cricket will think of Nathan Shock as an "almost legendary all-rounder." What is the equivalent expression in the land of baseball, this reviewer does not know, but if anyone was ever a good pitcher, catcher, fielder, and batter, that was Nathan Shock. From an intended career in engineering he turned first to psychology, later abandoning it for physiology. Psychology was "too vague." At present Shock heads what is almost if not quite the largest and oldest existing unit in the world devoted to a consideration of aging. His unit carries out a wide program of research in the human biological sciences including psychology and has close contacts with welfare services for old people in and around Baltimore. There is no one better qualified to view the work on aging in broad perspective, and this he has done splendidly.

The first impression of *Trends in Gerontology* is of a guidebook or catalog of gerontological research and work on welfare and education for older people, outlining programs and introducing personalities. It is, however, much more than this, for Shock is truly master of his subject and his statements are both admirably concise and have a remarkable penetration. Thus he gives a rapid and accurate orientation to newcomers to the studies of aging and also a very worthwhile piece of reading to those who are already in the field but wish to view their work in a wider context. The reader is left with the clear realization that here is an area of work which is expanding rapidly but is still small enough for those in various disciplines to remain coordinated and to recognize, as they often fail to do in the everyday life of the university, how interdependent they must be if they are fully to understand human behavior and function. Shock brings out the fact, without actually stating it, that some of this work is worthy to rank with the best scientific research anywhere in the world, while other parts of it are, as must happen in most new subjects, of much lower quality. The rather pathetic sentimentality and wishful thinking shown in some, although by no means all, of the educational and welfare programs as outlined for older people presumably reflects the lack of sound research in these areas at the present time.

Although concerned primarily with the United States, the book briefly mentions

some of the developments in other countries and is written in such a way that its significance clearly transcends its country of origin. The fact that it deals fundamentally with so many of the problems of aging which are met in all civilized countries makes occasional twists of the language peculiar to North America stand out in sharper relief than they otherwise would. (For instance, the author says, "The chronic disease hospital of the future will serve as the focal point for aggressive medical care and rehabilitation procedures." To the present reviewer this would imply that the patients were to be viciously attacked by the medical and nursing staff. What the author means, of course, is that in the future old people in hospitals will not be left to moulder in bed-ridden idleness but that active efforts will be made to get them better again and able to lead a useful life in the community.) We may hope that Dr. Shock will have the opportunity, when the time comes for a third edition, to broaden his canvas to include the whole world: there is no one else who could possibly do such a task.

THE *Supplement* to the earlier *Bibliography of Aging* is another improbable book and again a valuable one. When the present reviewer first saw the original *Bibliography* he felt that the vast classified list of references it contained was ridiculous. Subsequent use has shown how wrong he was and has raised a seemingly important problem of how reference to previous literature can be made most easily.

The present type of bibliography has obvious shortcomings compared with one which gives abstracts. On the other hand, the gathering together of references for a period of six years and their presentation in a manner such that those relating to a particular topic can be rapidly surveyed, has some advantages not possessed by a journal of abstracts where search has often to be made in many different volumes. Shock's bibliography does, perhaps, provide something of the best of both worlds by giving references not only to the original papers but also to journals such as *Psychological Abstracts* so that summaries can be rapidly found.

One way in which it could be made even more useful may perhaps be mentioned. Those who study the literature of any subject often waste a great deal of time because they cannot in advance distinguish between articles which (a) report new research or useful facts, (b) draw logical inferences from facts

whether new or old, (c) make stimulating speculations and suggestions, and (d) have none of these claims to attention. A bibliographer who attached labels to his references bringing out these distinctions might not win friends among authors but would certainly influence people in a sound and healthy way.

## Piaget and Mandelbrot

L. Apostel, B. Mandelbrot, and A. Morf

*Logique, langage et théorie de l'information.* (Etudes d'Epistémologie Génétique, III.) Paris: Presses Universitaires de France, 1957. Pp. vi + 207. 860 fr.

L. Apostel, W. Mays, A. Morf, and J. Piaget, with the collaboration of B. Matalon

*Les liaisons analytiques et synthétiques dans les comportements du sujet.* (Etudes d'Epistémologie Génétique, IV.) Paris: Presses Universitaires de France, 1957. Pp. 145. 600 fr.

Reviewed by DAVIS HOWES

*Dr. Howes, with a Harvard PhD eight years ago and a subsequent progress through Tulane, the Air Force, and the Center for Advanced Studies in the Behavioral Sciences, is now Assistant Professor of Psychology at the Massachusetts Institute of Technology and interested, as he has been for a full decade, in the experimental analysis of language. Like Mandelbrot, whom he reviews here, he has been impressed with the parallels between the molar laws of language and the laws of thermodynamics and believes that a statistical theory can come to account for these laws. He also confesses to a long-standing concern with analytic philosophy.*

THESE books are the third and fourth volumes of a series emanating from Jean Piaget's International Center for Genetic Epistemology in Geneva, the first two of which were recently reviewed in these pages (*CP*, Dec. 1957, 2, 309-311). The motive force behind the project is Piaget's conviction that the classical philosophical problems of epistemology can best

be solved by the empirical methods of the psychologist, particularly the child psychologist. To further this enterprise Piaget has brought together each year a group of interested persons from several relevant fields. The present volumes result from his collaboration with a mathematician (Mandelbrot), two logicians (Apostel and Mays), and a psychologist of Piaget's own outlook (Morf). In the first volume the contributors go their own separate ways. The second volume, despite the formidable list of contributors, is primarily the product of its final redactor, Piaget himself. As Piaget's own ideas are supposed to form the central theme of the whole series, I shall consider this second volume first.

The philosophical issue Piaget attacks here is the distinction between analytic and synthetic propositions. (Analytic propositions are those that are true or false independently of any empirical fact, like " $2 + 2 = 4$ " or "that which is a chair is a chair"; synthetic propositions assert something which requires investigation to be proved true or false, like "the world

is flat" or "John is my brother.") Piaget wishes to establish two theses. The first is that the difference between analytic and synthetic propositions is not a true discontinuity. To prove this point he asked 30 subjects, mostly university students in psychology, to classify a set of 17 isolated propositions. Sure enough, they classified some of the propositions as neither purely analytic nor purely synthetic, but as mixed, intermediate, or confused. (The fact that 5 of the 30 classified "a table is a table" as a purely synthetic proposition suggests how clearly these subjects understood the distinction.) It is hard for me to imagine that an instructor in elementary philosophy could fail to make this remarkable discovery the first time he examined his students on the subject. Otherwise the distinction would not have to be taught at all.

Piaget's second thesis is that even simple analytic truths are not innate, but must be learned by a process which proceeds in well-defined stages from failure to recognize concrete instances to immediate recognition of abstract principles. Here Piaget can exhibit his special flair for working with children. He shows children of 7-8 years two sets of buttons arranged in one-to-one correspondence, so that their equality is immediately apparent. One set is rearranged in full sight of the child who is then asked whether the two sets of buttons are equal. There are some striking protocols to show that even a simple partition of one set (from 7 into  $5 + 2$ , for instance) can so strongly convince a child that the two sets are no longer equal that he will refuse to believe it even after he counts them both. The interpretation of complicated protocols like these is always difficult, however, and Piaget's efforts at categorizing them into stages are to me unconvincing where they are not self-evident. The most one can say is that the process by which children learn the meanings of logico-mathematical terms like *equal* is both complicated and variable. The interesting possibilities of quantifying the experiment (in terms of the number of buttons and the difficulty of the partition) are left all but unexplored.

These are the heights, not the depths,



attained in this volume of 60,000 words. In the end, nothing whatsoever has been added to our understanding of the nature of analytic and synthetic propositions. All that can be salvaged are a few suggestive observations on the way certain children learn to use certain words. Where lies the root of this failure? Partly it is pretentious writing. What is said would not overburden a 25-page article. But chiefly, I think, the fault lies in the very nature of the enterprise. Piaget wishes to apply experimental methods to epistemological questions. So do we all. Sensation, perception, learning, language: all are essentially epistemological problems. In these fields, however, psychologists restrict themselves to those questions about the nature of knowledge that are amenable to experimental analysis. What distinguishes Piaget's approach is his insistence on directly applying psychological methods to epistemological issues as they are formulated by philosophers. Now, philosophical conceptions are born of logical, not experimental, investigation. The mere fact that we are interested in a philosophical issue does not mean it is suited to experimental analysis. In fact it usually is not. The art of experimentation is not so simple as Piaget would like it.

IF the second of these volumes bears the stamp of Piaget's ideas, the first is dominated by the thinking of Benoît Mandelbrot. It is a welcome change. Mandelbrot is a French mathematician whose thesis on games of communication (1952) combined the elements of the theory of games and the theory of information to deduce, on the one hand, the laws of thermodynamics and, on the other, the statistical structure of language. This introduction may frighten a few more skeptical souls who have observed that applications of information theory to psychology usually consist of drawing simple formal analogies between human behavior and the behavior of complex physical systems like computers, without consideration of all the *disanalogies* between them, or of measuring in bits everything that used to be measured 25 to 50 years ago by the more satisfactory method of complete probability distributions.

Mandelbrot's work, however, is different. In the first place, he has thoroughly studied the empirical phenomena of language, and indeed has called attention to subtle details in the data that have escaped the attention of people working in the field. At the same time, he understands that the information concept, like its thermodynamic prototype, the statistical definition of entropy, is essentially a theoretical construct rather than a measuring rod. Finally, he has a firm intuitive conception of the linguistic process and never permits either secondary empirical details or formal mathematical complexities to sidetrack him from the major theoretical problem. I know of few works in American psychology that rank with Mandelbrot's analysis of language as an example of sophisticated theoretical method in action.

The first essay of this volume, *Macroscopic Statistical Linguistics*, offers the non-mathematical reader the fullest and clearest exposition of Mandelbrot's ideas that I have seen. Although no new material is introduced, readers familiar with his technical papers will also find this article valuable because the relaxed style of presentation brings out many insights and suggestions that are buried in the difficulties of the earlier articles. Mandelbrot's theory is founded on the work of the Harvard philologist, G. K. Zipf, who showed that the set of word frequencies found in any large sample of language obey a distribution law of astonishing precision and generality. Indeed, I have heard more than one psychologist argue that the law is *too* precise and *too* general to be of any importance! Zipf felt that the explanation of the law was to be found in a principle of least effort governing both the speaker and the listener in the communicative act, but he was never able to give this intuitive idea a clear formulation or to show that the observed law followed from it.

Mandelbrot enters at this point. First, he corrects Zipf's statement of the law to bring it into closer correspondence with the data. Next, he gives a precise mathematical meaning to Zipf's notion of least effort by assuming that, in communicating, one acts to minimize the average cost per word of transmitting a

given amount of information—in the mathematical sense given that term by Shannon. He then derives his corrected form of the Zipf law from this postulate for a very general definition of the cost. He proceeds to demonstrate that the same result represents the optimal solution for several similar criteria. In addition, he shows how the parameters of the macroscopic law receive their interpretations in the theory. (In the face of these accomplishments it is perhaps ungracious to complain that he fails to collate these interpretations with empirical measurements of the parameters in actual samples.) These bare bones of the theory are covered by a rich texture of suggestions and speculations for further investigation.

A second essay, *Logic and Language Considered from the Point of View of the Precorrection of Errors*, also bears the imprint of Mandelbrot, although its final form is due to Apostel. It introduces an intriguing speculation about the fundamental nature of analytic systems. Logic and grammar consist of bodies of rules which permit certain combinations of elements and forbid others. Communication theory also provides a set of such rules for the construction of optimal codes to combat the possibility of error. If we could show that there exists a rule of logic and a rule of grammar corresponding to the rules for precorrection of codes, might we not conclude that these analytic systems derive their peculiar power of conviction from a coding property that sets the necessary condition for all communication? The program thus suggested is never quite executed, yet enough interesting parallels are worked out to make it an important article for anyone interested in the nature of the analytic.

LOOKING back over these two volumes, I can find precious little that the authors have in common other than an interest in language and a notable inability to write it clearly. Yet there is a certain reassurance to be gained from this diversity. Reading the two volumes in the order of their publication, as I did, it is hard not to grow impatient with Piaget's labyrinthine lucubrations. Had I read them in the reverse order,

however, I might have become less exercised over the failures of that volume. For the transition from Piaget to Mandelbrot—with all the intensification of theoretical method that is implied therein—is really only a reflection of a rapid improvement in the standards of

theoretical method that has touched many areas of psychology recently. Rapid growth inevitably means rapid obsolescence. It is a small price to pay, after all, for the fun of working in a field during that exciting phase of its development.

## Mating: Cameo Fits Intaglio

Robert F. Winch

*Mate-Selection: A Study of Complementary Needs.* New York: Harper & Brothers, 1958. Pp. xix + 349. \$5.00.

Reviewed by GERHARD NEUBECK

Dr. Neubeck is Assistant Professor in the Family Life Program at the University of Minnesota and Senior Student Personnel Worker in the Student Counseling Bureau, where he specializes in marriage counseling. He has recently reviewed LeMasters' *Modern Courtship and Marriage* (CP, May 1958, 3, 122f.).

HERE is a book attempting to answer the old question, do we marry 'similars' or 'opposites'? This is fascinating stuff. About that there cannot be any doubt. New insight about the ancient institution from a psychological point of view is very much needed.

Even though Winch's study included only twenty-five couples and a control group, and though the book itself is a less than well-integrated performance, the idea itself of conceptualizing marriage as fulfillment of complementary emotional needs deserves a most respectful and enthusiastic audience.

Robert Winch is a sociologist who, as a student of Ernest Burgess, learned all about homogamy and is thoroughly familiar with the research about homogamous marriages—as can be seen by his chapter devoted to that topic. Winch was attracted though to psychoanalytic theory, and, when he discovered H. A. Murray and his "needs," he and his associates, of whom Thomas and Virginia Ktsanes must be singled out, found the rationale they needed for a design.

His theory, which he means to hold

true for middle-class America, states that "in mate selection each individual seeks within his or her field of eligibles for that person who gives the promise of providing him or her with maximum need gratification." This rule reflects a departure from sociology, which has been concerned almost exclusively with studies about homogamy directed at external factors like age. While Burgess and Wallin (almost to their surprise?) found such factors as empathy, flexibility, and adaptability highly related to marital success, there had never been a systematic study of psychological phenomena until Winch's courageous departure from tradition.

THE heart of his research is contained in chapters espousing the theory and testing the general hypothesis of complementary needs in mate selection. These chapters are preceded by a general discussion of the problem, a chapter on mate-selection in non-western society written by Linton C. Freeman, and a chapter on love, and they are followed by chapters filled with case illustrations of complementarity taken from the data of the study. Lastly, there are the chapters with the implications, particularly for marriage counseling.

Some of the chapters mentioned undoubtedly were included to sell the book to a trade market and fit only vaguely into the context of the book. (*Mate-Selection* is not a text. Winch's basic

research has appeared in sociological journals, as well as in the *Journal of Abnormal and Social Psychology*.) One chapter, *Complementarity and Culture*, is a loose, almost journalistic treatment of observations in other countries in regard to his theory and is unworthy of inclusion. The cases, however, are a highly literary treatment of clinical illustrations. For example, there are Thurberian and Ibsenian complementarity respectively.

E. B. White of the *New Yorker* is quoted as having described the men in Thurber's drawings as "frustrated, fugitive beings." "They seem vaguely striving to get out of something without being seen (a room, a situation, a state of mind); at other times they are merely perplexed and too humble, or weak, to move." The women are quite different. "Temperamentally they are much better adjusted to their surroundings than are the men, and mentally they are much less capable of making themselves uncomfortable."

Ibsenian complementarity, on the other hand, is taken from *A Doll's House*, where Torvald is saying to his wife, "No, no, only lean on me; I will advise and direct you. I should not be a man if this womanly helplessness did not just give you a double attractiveness in my eyes." Nora is saying, "I have been your doll-wife, just as at home I was papa's doll-child; and here the children have been my dolls. I thought it great fun when you played with me, just as they thought it great fun when I played with them. . . . I was your little sky-lark, your doll, which you would in the future treat with doubly gentle care because it was so brittle and fragile."

Having teased the reader with these observations, the reviewer is at last ready to open the curtain and present the main production.

AFTER an examination of personality factors, Winch cut down Murray's needs to twelve and also included three general traits. His hypothesis is stated thus: "Two needs (. . . X and Y) in two different people (. . . A and B) are complementary when A's behavior in acting out A's need X is gratifying to B's need

Y, and B's behavior in acting out B's need Y is gratifying to A's need X." There are, however, two types of complementarity. Type I is when the same need is gratified in both A and B but at very different levels of intensity. There is a negative interspousal correlation is hypothesized. In type II different needs are gratified in A and B, and the interspousal correlation may be hypothesized either to be positive or negative, contingent upon the pair of needs involved. To quote a number of need pairs: abasement—autonomy, autonomy—hostility, deference—dominance, nurturance—succorance. In addition to these two types, two other factors complicate the picture: these needs are either overt or covert and may be complemented from within the marriage or from without the marriage.

The problem, which Winch faced and which in spite of the study we are still facing, is the measurement of the needs. Winch decided not to use the Edwards Scale because he felt it had no validity for the measuring of these needs. Instead subjects were interviewed with open-ended questions, and a content analysis was made. In addition there was a case history interview and an eight-card Thematic Apperception Test.

A great number of interspousal correlations were hypothesized. The data in general support the hypothesis of complementary needs in mate-selection. Where there is no support, there does not seem to be a counter trend.

For the worker in the vineyards—this reviewer—some interspousal correlations seem to appear more often in counseling cases than in others. The single, most important instance is the nurturance-succorance constellation, which in many ways may reflect the Oedipus or Electra-problem personalities. The question which Winch cannot answer is the degree in which marriages based on this type of attraction can be successful. Undoubtedly, there is a continuum here where complementarity of normal needs at one extreme and complementarity based on neurotic needs at the other bring about different marital results. If there is one thing to which Winch has pointed, it is to the idea that emotional homogamy as a theoretical framework cannot be supported.

*Again available . . .*

## **SCHOOL PSYCHOLOGISTS AT MID-CENTURY**

*Edited by* NORMA E. CUTTS

The Report of the Thayer Conference, published in 1955, covered an intensive study of the development of school psychology. Because of continuing demand, the Report has been reprinted.

**230 pages**

**Price \$2.75**



**Order from:**

**AMERICAN PSYCHOLOGICAL ASSOCIATION**

**1333 Sixteenth Street, N. W.  
Washington 6, D.C.**



**MENTAL DEFICIENCY**  
**Comprehensive Treatment in**  
**Mental Retardation**

Pineland State Hospital and School, Pownal, Maine. Peter W. Bowman, M.D., Warren C. Bower, Ph.D., and Barbara S. Ferguson, M.D. Produced with the support of Smith, Kline and French Laboratories. 16-mm, black and white, sound, 40 min., 1957. Available through Smith, Kline and French Laboratories, Philadelphia, Pennsylvania.

*Reviewed by* **GEORGE M. GUTHRIE**  
*The Pennsylvania State University*

The Pineland State Hospital of Pownal, Maine, with the support of a drug company, has produced this film record of a three-month experiment on comprehensive treatment of mentally retarded patients. Using 144 females, the experimenters subjected all to an improved milieu. An experimental group of 76 received chlorpromazine in addition. The film attempts to depict the results. This is not the place to evaluate the experiment.

There are some frank shots of crowded wards and untidy patients. Some of the therapeutic activities introduced are shown. Three cases are presented in some detail to show changes in cooperativeness and social maturity. Both groups improved, with greater improvement with the medication.

For teaching purposes this film could be used to show some material about mental retardation and the facilities for treatment. At the same time the film provides an excellent opportunity for discussing the problems of the design of experiments and the development of measures which identify more clearly the crucial factors involved. (But, as in this study, if we change everything in a patient's environment we still do not

**ADOLPH MANOIL**  
Film Editor

know what helped him!) The pictures and sound track are adequate for a teaching film.

This is one of the few films available on mental retardation in spite of the fact that most of the material in the area could be vividly presented on film. There would be a wide use for a film designed to teach the different behavior patterns and capacities of various degrees of retardation. Until we have some such films designed for teaching, this one is to be recommended for undergraduate classes.

**DISPLACEMENT**

**Anger at Work**

University of Oklahoma, producer. 16-mm, black and white, sound, 21 minutes. Available from International Film Bureau, Inc., 57 West Jackson Boulevard, Chicago 4, Illinois. \$125.

*Reviewed by* **NORMAN L. MUNN**  
*Bowdoin College*

This film's contribution is made in the first few minutes. The rest is exceedingly tedious. Its theme is that outbursts of anger and headaches common among workers in business and industry are displaced expressions of tension originating elsewhere—an ulcer-producing wife, a worrisome child, or a flat tire on the way to work. The solutions suggested appear too slick: sublimated chopping of weeds, a hard bout of golf, pride in one's work.

*Anger at Work* doubtless has some value in worker education but the reviewer could not recommend its use in the teaching of psychology. For this purpose, the first five minutes would be sufficient.

(For another review of this film, see *CP*, May 1957, 2, 151.)

**DRUG THERAPY**

**Rapid Treatment of Acute Mania**  
**with Combined Coramine-Elec-**  
**troshock Technique**

Howard D. Fabing, Christ Hospital, Cincinnati. 16-mm motion picture film, color, sound, 20 min., 1951. Available through Ideal Pictures Corp., 58 E. South Water Street, Chicago, Illinois, and other Ideal Picture Corp. offices.

*Reviewed by* **WILLIAM E. OLSON**  
**and JOHN H. MCCORMACK**

*Veterans Administration Hospital,*  
*Kansas City*

Like several films done under the technical direction of H. D. Fabing, *The Treatment of Acute Mania* is colorful, dramatic, and has a touch of the comic relief. It presents the course of hospitalization of a middle-aged man suffering from an acute manic attack. The man is treated for approximately two weeks. He receives about eight electric-shock treatments, each of which is preceded by an injection of coramine, 5 cc. in 5 cc. of water. The manic attack subsides. The patient is discharged from the hospital with instructions to return in three days for observation. At the time the film was released, a year or so later, there had been no return of symptoms. The narrator discloses that well over a hundred patients of varying diagnostic types were treated with this technique, that the average number of treatments was 7.8, and that the rate of favorable outcome was 95%. The term *favorable* was not further defined. If the course with 95% of the patients treated was similar to that of the man depicted in the film, the results were favorable indeed.

The rationale for the use of coramine, a central nervous system stimulant, with electric shock in the treatment of manic states, is shown to be derived from the work of Pavlov on reflexology. At ordinary degrees of intensity, there is a direct relationship between strength of stimulus and strength of response. The transmarginal or ultramaximal stimulus, a stimulus of extreme intensity, however, results in inhibition of response. It was accordingly postulated that the excited behavior of the manic, the re-



## DIFFERENTIAL PSYCHOLOGY, Third Edition

by ANNE ANASTASI, *Fordham University*

Incorporating recent findings in biology, anthropology, and ethnic sociology, the third edition of this widely-used text has been extensively reorganized and condensed in order to clarify important concepts. Like the previous editions, the revision treats the major concepts, methodologies, and data pertaining to individual and group differences in behavior. Emphasis is on critical evaluation of procedure and interpretation. 1958, 664 pages, \$7.50

## THE PSYCHOLOGY OF RELIGION

by WALTER HOUSTON CLARK, *Hartford Seminary Foundation*

"There is no doubt in my mind but that this book will hold a significant place in the psychology of religion . . . this author is equally at home in both psychology and religion, and is consequently able to relate them together with unusual clarity. And with his comprehensive view of the history, literature, and contemporary interests of each he provides a series of vital connecting links between them."—*Pastoral Psychology*

1958, 485 pages, \$5.95

## THE PSYCHOLOGY OF ADOLESCENCE

by ARTHUR T. JERSILD, *Teachers College, Columbia University*

"Arthur T. Jersild . . . needs no introduction to American psychologists. This new book . . . is remarkable because it is a text with a point of view, or rather with several distinct points of view . . . it is refreshing to find a book in which the author not only expounds his subject but also has produced a thoughtful and thought-provoking book that carries the theme of the importance of self-awareness and self-acceptance through from beginning to end."—*Contemporary Psychology*

1957, 438 pages, \$5.25

## PERSONAL ADJUSTMENT. An Approach through the Study of Healthy Personality

by SIDNEY M. JOURARD, *University of Florida*

Written from a positive point of view, this unique book discusses the factors determining the healthy adjusted personality and compares the normal, unhealthy and healthy versions of the trait in question. The sections on expositions of interpersonal relations, love, the self-structure, and conscience are new to the field.

1958, 462 pages, \$5.50

## INTRODUCTORY CLINICAL PSYCHOLOGY

by SOL L. GARFIELD, *University of Nebraska Medical School*

"The character of clinical psychology, as a field which is at once artistic, intuitive, scientific, and objective, makes it mandatory that the author of an introductory survey of the field be a person of catholic inclination. In this respect Dr. Garfield qualifies admirably. . . . His book reflects his breadth and sophistication. . . . The organization and presentation of the book are excellent. Dr. Garfield's writing style is lucid, and the reader knows at any moment what the relationship of his present concern is to the over-all plan of the book."—*Contemporary Psychology*

1957, 469 pages, \$6.00

## A COURSE IN MODERN LINGUISTICS

by CHARLES F. HOCKETT, *Cornell University*

An important reference, this new linguistics text combines completeness of scope and simplicity of presentation. All topics are consistently inter-related. Designed for graduate or undergraduate classes, the text provides detailed and up-to-date discussion on most of the major areas in the study of language.

1958, 621 pages, \$7.50

*The Macmillan Company*

60 FIFTH AVENUE, NEW YORK 11, N.Y.

sult of strong cortical stimulation, might disappear when this stimulation became ultramaximal through augmentation by coramine and electric shock.

The film is directed in the style of the promotional productions of pharmaceutical houses. It tends to oversimplify and oversell. Its strongest point in the reviewers' opinion is an extraordinarily fine depiction of the acute manic state. A sequence portraying the administration of electric shock is also well done. For these reasons the film could be used profitably as an audio-visual aid in a course in psychopathology.

Following are two documentary films on drug therapy that illustrate the use of chlorpromazine.

Both films present the condition of the patients before and after the administration of the drug. The films could be supplemented with data on drug therapy as available in such publications as Nathan S. Kline (Ed.), *Psychopharmacology*: Washington, D. C.: A. A. A. S., 1956; and Harold E. Himwich (Ed.), *Tranquilizing Drugs*: Washington, D. C.: A. A. A. S., 1957.

### Ataraxia

Albert Kurland, Spring Grove State Hospital, Catonsville, Maryland. 16-mm, black and white, sound, 25 min., 1955. Available through Smith, Kline & French Laboratories, Medical Film Center, Philadelphia, Pennsylvania.

Ataraxia or ataraxy is defined in Dorland, *The American Illustrated Medical Dictionary*, 22 ed., as "Perfect peace or calmness of mind." This is the state of the patient at which the use of various tranquilizers is aimed.

The film under consideration presents the clinical aspects of four patients before and after the administration of chlorpromazine (Thorazine).

The first patient, a case of severe obsessive compulsive psychosis, is presented in a characteristic state of agitated depression. His behavior makes the interview with the doctor almost impossible. Then the same patient is shown some time after the administration of chlorpromazine. This time the

patient appears calmer and less depressed. His condition can be judged also from his answers to various questions of the doctor.

Three other cases that show relatively similar behavioral changes after medication are also shown. These cases represent two schizophrenics and one with a psychosis related to organic brain damage.

All four cases are presented in detail as to their behavioral patterns manifested during the interview. The film as a whole represents a demonstration on the effects of chemotherapy with chlorpromazine. Whether these effects are permanent or transient it is not stated, nor are follow-up data on the patients given.

The film as a documentary on chemotherapy is certainly instructive. The sound track, however, is poor especially for the patient's voice.

### Chlorpromazine in the Treatment of Psychiatric Disorders

Marshall Smith, Dr. Norman M. Beatty, Memorial Hospital, Westville, Indiana. 16-mm, black and white, sound, 30 min., 1955. Available through Smith, Kline & French Laboratories, Medical Film Center, Philadelphia, Pennsylvania.

This film is another documentary on chemotherapy. It presents 17 cases of psychiatric patients treated with Thorazine. Ten of these patients are presented through an interview before and after the administration of the drug.

All cases are part of a nineteen-day study. Behavior of the patients at the verbal and nonverbal level, during the interview, shows striking differences as the result of drug therapy.

These results confirm the more detailed presentation of the four cases in the film *Ataraxia*.

The present film is valuable as a documentary at the descriptive level. Its research value would be greatly increased if certain supplementary data on the case histories, dosages, and other variables of the experiment were provided.

## Films and Other Materials

### DRINKING AND DRIVING

#### None for the Road

Raymond G. McCarthy, Yale Center for Alcohol Studies and Leon A. Greenberg, Yale University, advisers. Produced by Young America Films, Inc. 16-mm motion picture film, black and white, sound, approximately 16 min., 1957. Available through McGraw-Hill, Text-Film Department, 330 West 42nd Street, New York 36, New York. May also be ordered through Mental Health Materials Center, 1790 Broadway, New York 19, New York. \$75.00, rental \$5.00 per day.

Psychological effects of alcohol are discussed and analyzed as related to driving.

Laboratory experiments with rats are also shown.

### HUMAN RELATIONS IN INDUSTRY

#### Men at Work

National Film Board of Canada. 16-mm motion picture film, black and white, sound, 27 min., 1954. Distributed in the United States by McGraw-Hill Test Film Department, 330 West 42nd Street, New York 36, New York. May be ordered also through Mental Health Materials Center, 1790 Broadway, New York 19, New York. \$135.00, rental \$7.00 per day.

Human relations in industry affecting both labor and management are presented.

### ATTITUDES TOWARD MEDICAL CARE

#### Progress Report—1956

Produced by Smith, Kline and French Laboratories in cooperation with the American Medical Association. 16-mm kinescope film, black and white, 30 min., 1956. Available through Smith, Kline and French Laboratories, Medical Film Center, Philadelphia 1, Pennsylvania.

Preliminary results of a survey on public attitudes toward medical care are presented.

The film shows also a cataract operation.



*Knowledge is of two kinds: we know a subject ourselves, or we know where we can find information upon it.*

—SAMUEL JOHNSON

# ON THE OTHER HAND



## LOGIC AND PSYCHOLOGY

The review of Peter Geach's *Mental Acts* (CP, June 1958, 3, 157ff.) must be protested in every respect.

(1) The reviewer seemed to see the book as a harbinger of some sort of "union of logic and psychology." This is highly unlikely. The book is written wholly in the spirit of Frege, not the least of whose accomplishments for philosophers was the total demolition of what usually goes under the name of 'union' between logic and psychology. Where such 'union' is intelligible, it seems now to consist only in the use of certain logico-analytical methods in the (informal as well as formal) construction of psychological theories. But in this respect, Geach's book has nothing to offer, much less anything novel to American psychologists familiar with the writings of Feigl, Bergmann, Spence, etc.

(2) The reviewer also discerns a certain (archaic?) 'orientation' in Geach's views on the nature of concepts, judgments, and mental acts, viz., "scholasticism." But Geach's arguments, by and large, would be unfamiliar if not unacceptable to most Thomistic philosophers and psychologists today. Also, the typical contemporary Thomist is not interested in studying the writings of "Wittgenstein, Russell, Ryle and Price," while, as the reviewer noticed, Geach is. So his fondness for scholastic tag lines and his frequent citation of St. Thomas is hardly enough to yield an "orientation of scholasticism" in the book. We might as well take Geach's facility with mathematical logic and his enthusiasm for Frege and his intramural disputes with Quine as proof that the author has an orientation of logical empiricism, or say that, because he accords Wittgenstein peerless respect, his orientation is one with the higher lexicographers at Oxford. All such alleged 'orientations' merely obscure the independence and originality of the book.

(3) The reviewer has exactly one criticism to make, but it is ill-taken. He says that Geach "ignores the fact that a most important feature of many concepts is actually a catalogue of common elements," and that to admit this is not to commit oneself to "the abstractionist account of

the genetic aspect." I hazard that what has been alleged so unperspicuously here is this: (a) suppose we agree with Geach that every concept is a capacity; still many concepts are such that to have them is to have a capacity to recognize a given object (property), which many different situations (objects) exhibit, as the same object (property); (b) Geach ignores this fact; (c) he denies that we acquire or develop our concepts by abstracting any common property in any mental act or series of acts; (d) perhaps (b) because (c); (e) in fact, one can assert (a) and be opposed to abstractionism in "the genetic aspect." As I read Geach, it is certainly true to say (c) of him, and true to say (e); but it is false to say (b) of him and therefore (d) is irrelevant. And (b) must be false because (a) is a slightly disguised platitude true of *all* concepts, viz., that certain similar stimuli occur at different times and places and yet can be a sufficient condition for evoking the exercise of the same conceptual capacity. Geach nowhere records this platitude (nor its companion, that a conceptual capacity can be exercised more than once), but this is hardly evidence that he "ignores" it; he could hardly fail to be aware of it.

(4) What is particularly unfortunate about the review is its failure to convey even one of those aspects of the book which show how contemporary logical (or conceptual, philosophical, 'linguistic') analysis can be brought to bear on both experimental and theoretical psychology in ways other than those encouraged by the logical empiricists. I cannot engage here to discuss any of these issues; one of them is the way in which Geach strives to keep behaviorism honest (*Mental Acts*, pp. 2ff., 75ff., 107ff.). Any philosopher who chances to read Mr. Peter's review of this book will surely feel that CP's audience deserved a much better appraisal than it received of Geach's terse and sophisticated analysis.

HUGO ADAM BEDAU  
Princeton University

The purpose of the short review was to present to a psychological audience the reactions of a psychologist. It is too bad that Mr. Bedau does not write a real

philosophical supplement. There is no question about his ability to do a better job.

Mr. Bedau's reaction is what the reviewer had expected from a psychologist. It seems that he has missed the main point the reviewer was trying to get over, namely, that the ideas of modern logicians could be plundered to the advantage of psychology, for premises and working hypotheses to use in reasoning about reason. This would be something more than merely adapting the logico-analytical methods.

It is clear from Mr. Bedau's letter that all of those who have the rigidly fixed notion that psychology and logic are somehow incompatible areas of thought are not working in psychology departments.

H. N. PETERS  
Jefferson Barracks, Mo.

## MODELS OF SCIENCE

When a review attributes a whole series of basic flaws to a book, the review and the book probably disagree on some implicit, but very fundamental, premises. Such differences are not always, or usually, matters of taste. Book or review may be wrong.

The recent review by Professor Bush of my *Models of Man* (CP, June 1958, 3, 150f.) contains as implicit premises a particular model of what constitutes a science. This model can be inferred, I think, either from the review or from Professor Bush's book with Mosteller (CP, Apr. 1956, 1, 99-104). Briefly, it is this: Write down a system of difference or differential equations; solve them to find the time path of the system; estimate the parameters by fitting the time-path equations to data; use appropriate statistical tests to evaluate the fit.

This is a splendid model, which should be applied in all those rare instances where it fits. The part hardest to take seriously is the emphasis on 'goodness of fit.' In the successful sciences, the fit of data is usually so obvious that no one worries about confidence intervals or Type I and Type II errors. When the data are so poor that there is doubt whether the hypothesis has been proved or disproved, the natural scientist improves his observational techniques and gets new data in order to make statistical necromancy irrelevant.

The review's model of science, while attractive, rarely fits the problem of the working scientist. The scientist often cannot get data on time paths (e.g., in testing the Homans and Festinger models). Shall he then (a) try to generate the time-path data, (b) sigh and give up, (c) deduce from his theory consequences that can be tested with other kinds of data (e.g., data

on existence and characteristics of equilibria)? The third course, liberally illustrated in *Models of Man*, often avoids estimation of the system parameters, and hence provides qualitative tests of the model that are, in some cases, stronger tests than are curve-fitting exercises. In discussing the Homans model, the review equates empirical testing with fitting time series and dismisses summarily the qualitative evidence applied in the book to the Homans and Festinger models. In the natural sciences, empirical testing includes equilibrium data and qualitative evidence. For instance, the packing-fraction evidence for mass-energy equivalence does not rest on fitting curves to time paths. There are numerous examples of important uses of qualitative evidence in quantum physics, cosmology, and physical chemistry quite analogous to those in *Models of Man*.

The model of science proposed by the review leaves little room for variables that are not radically operational—directly and cardinally measurable. The review points out that *Models of Man* takes derivatives of variables that elsewhere are treated only as ordinals. Clearly we cannot test with ordinal observations properties that depend on the cardinal measurement of the variables. This *Models of Man* does not do. It develops a model—making free use of the assumptions of cardinality, continuity, and differentiability—deduces certain consequences that are invariant under ordinal transformations, and tests these consequences. The review ignores the discussion of the cardinality-ordinality issues on pages 91-93. The argument in the review would, if accepted, force us to abandon the use of imaginary numbers in physics, or, as pointed out in the footnote to page 92, the use of utility functions in the theory of consumer choice under certainty.

The review seems to picture a theory as consisting of a set of axioms which theorems are deduced. This picture only occasionally fits empirical science. The scientist rarely starts with a complete formal axiom system and never makes a long chain of deductions if he can get by with a short chain. For example, in *Models of Man*, the models of satisfying behavior show that most of the virtues claimed for optimizing assumptions can be obtained otherwise, with a tremendous reduction in the information-gathering and computing demanded of the organism. The 'programmatic' chapters on bounded rationality carry through as much analysis as is needed to prove this point. Incidentally one may note that the review misses the point of the model of "minimax regret," which does not assert

that rats or people minimaximize regret but simply warns how easy it is to construct alternative theories that fit the data asymptotically.

Finally, the review attributes to me as author a belief in a sharp division of labor among theorists, statisticians, and experimenters. On the contrary, I believe that empirical work (not all of it experimental) and theory should go hand in hand, and *Models of Man* consistently exhibits this point of view.

The picture of science implicit in the review is held by a large share of the mathematicians and statisticians who are investigating quantitative approaches to human behavior. There is a danger they may persuade both those sympathetic and those unsympathetic to mathematics that this is what mathematical social science must and will be like. While the main intent of *Models of Man* is substantive, it intentionally dissents from the prevailing methodological orthodoxy, offering an alternative model for those who find this orthodoxy too austere.

HERBERT A. SIMON  
Carnegie Institute of Technology

#### THE LOVE PLOT

Professor Taylor's review of Cleckley's *The Caricature of Love: A Discussion of Social, Psychiatric, and Literary Manifestations of Pathologic Sexuality* (CP, June 1958, 3, 163f.) is introduced as "cool comment on a burning question." It seems to me to be a bland restatement of an incredible supposition. We are supposed to believe there is a homosexual plot afoot. Taylor says (p. 164), "We know that many a minority group tends to set itself up as right and tries to condemn or indoctrinate the common herd. Cleckley shows that the sexual aberrants in literature constitute, more or less wittingly, such a group." This notion of a homosexual plot is used to explain the perversion of love in literature. In addition to the sex perverts, psychoanalytic theories are charged with having "stimulated and confused our understanding of sex and love."

There is no quarrel on my part with the actuality of the phenomenon of the glorification of perversion. Cleckley does a remarkable job of documentation here, and his wealth of concrete detail makes his book thoroughly enjoyable and worth while. The mature social scientist, however, cannot but marvel at the simple naiveté with which all this is explained. Both Cleckley and Taylor blame the degradation of love on a plot by homosexuals

abetted by psychonolytic doctrines. A different explanation seems preferable to me.

Does it not appear likely that the widespread misuse of psychoanalytic theory outside of the field of psychiatry is due less to the machinations of sex perverts than it is to the surrender by social scientists themselves of their role as analysts of society? Instead of an analysis of society, theorists in social science who borrow their glory from Freud usually reduce social phenomena to individual psychopathology. When social scientists take up with this oversimplification, they abdicate their field. Then in come the pretenders. The fools rush in where angels fear to tread. The responsibility for this influx lies less with the fools and more with the angels. Yet Cleckley and Taylor point only to the fools and blame the homosexual knaves, scapegoats to excuse the dereliction of social scientists. That surely is a caricature of social science.

SOLOMON D. KAPLAN  
University of Kansas Medical Center

I agree with Dr. Kaplan that we need social science—but as supplementary to and not more basic than individual science.

As I read Dr. Cleckley's book and my review, however, I find Dr. Cleckley explaining not all but some sexual corruption, not through a 'knaves' plot abetted, but through the defensory effort of abnormal individuals helped by psychoanalytic doctrine to persuade themselves and the public. We need not and can not blame all abnormalities of love on homosexuals; nevertheless aberrants, mentors, and the public need to recognize various sexual and other abnormalities and their defenses, including propaganda; and all concerned need sound sense, scientific data, and humane enlightenment.

W. S. TAYLOR  
Smith College

#### CASE HISTORIES: FACT AND FICTION

In *A Baker's Dozen of Good Paper-bounds* (CP, May 1958, 3, 119-120), Calvin S. Hall lists Robert Lindner's *The Fifty-Minute Hour* with the note that it consists of "case histories from the point of view of the therapist. Includes the gripping case of the jet-propelled couch." It is questionable whether this kind of a book, which may well be fiction parading as case history, should be recommended "for reading by the nonspecialist adults, junior and senior high-school students, and junior-college students." An alternative view is that *The Fifty-Minute Hour* is one of a number recent collections of so-called case-



history materials which are highly fictionalized, give a distinctly misleading and over-sold impression of psychotherapy, and are dangerous reading even for a well-trained psychologist, let alone a poor unsuspecting layman or young student.

Not that psychologists, including the present writer, do not usually fictionalize their case presentations to some extent. Of course they do—and, in fact, should continue to, if they are to protect their patients' identities and make their points clearly. But Lindner's book, which is subtitled *A Collection of True Psychoanalytic Tales*, goes to such extremes in this respect that the informed reader, and particularly one who has had therapeutic experience, must suspect that it would more aptly be subtitled, *A Collection of Psychoanalytic Tall Tales*. Virtually every one of its five stories is replete with Freudian clichés, overly neat-fitting interpretations, near-miracle cures, and incredible feats on the part of the analyst, items which are unbelievable and which can lead unsophisticated readers to have unrealistic expectations of any psychotherapy in which they may participate.

In support of the hypothesis that some of the main events narrated in *The Fifty-Minute Hour* are highly fictionalized, I submit the remarkable parallelism between the life and fantasies of 'Kirk Allen,' the alleged patient portrayed in its most famous story, *The Jet-Propelled Couch*, and the life and fantasies of Austin Tappan Wright, whose best-selling novel, *Islandia*, was written early in this century and posthumously published, in 1942, several years before Lindner presumably saw 'Allen' and reported on his 'case' in 1950. The similarities between the imaginative life of the supposed patient, 'Kirk Allen,' and the real Austin Wright are rather startling. Like 'Allen,' Wright became involved in a fantasy about an imaginary continent (in 'Allen's' case, it was an imaginary planet) when he was around twelve. Like Lindner's supposed patient, Wright was most peculiar, and spent literally thousands of hours in his dream world, working out every possible detail of his fantasized continent, and actually describing his visions in over two thousand pages of manuscript (from which the novel, *Islandia*, was later condensed).

Where 'Allen' was an intelligent scientist, Wright was a brilliant philosophical lawyer and professor. Where the protagonist of *The Jet-Propelled Couch* was "a vigorous looking man of average height, clear-eyed and blond . . . his manner . . . was charming," the real-life author of

*Islandia* was "a singularly attractive man." While 'Kirk Allen,' according to Lindner, was raised on a remote Polynesian island and spoke with an underlying Polynesian dialect, the setting of *Islandia* is a remote Polynesian-like island and the language is Polynesian in character.

So goes the unusual parallelism. But more! Perhaps the most unique aspect of Wright was that not only did he write his main work, *Islandia*, over a period of many years, but supplemented it with other works about his visionary island. These supplementary works included (a) a lengthy "philosophical history of *Islandia* from the earliest times, with elaborate accounts of the great men and the political, religious, and economic movements that agitated the 'Karain Continent'"; (b) a history of *Islandian* literature; (c) detailed maps of his imaginary land; (d) manuscripts on the flora and fauna of *Islandia*; (e) works on the geological structure of the fantasized continent; and (f) many other papers and notes about *Islandia*. Coincidentally, 'Kirk Allen' supposedly also wrote a main manuscript of thousands of pages about his imaginary planet, as well as (a) a "200-page history of the empire"; (b) a glossary of names and literary terms; (c) "82 full-color maps carefully drawn to scale"; (d) a manuscript entitled, *The Fauna of Srom Olma I*; (e) a work on *The Geology of Srom Olma I*; and (f) many other papers and notes about his fantasized planet.

'Coincidence' piles upon 'coincidence' as one reads Lindner's *The Jet-Propelled Couch* and Wright's *Islandia*. Since 'Kirk Allen,' if he ever existed, began his fantasizing and writing a decade before *Islandia* was published, it is difficult to see how he could have plagiarized from the works of Austin Tappan Wright. Of course, he could have read *Islandia* when he was in his twenties or thirties and then duplicated Wright's feat and misrepresented to Lindner the origins of his fantasies. Or, being disturbed in a manner similar to Wright, he could quite independently have paralleled the highly unique imaginings and writings of the author of *Islandia*. Certainly, many openly psychotic and more covertly peculiar people have the most

curious fantasies, implemented by amazingly minute acted-out or written-out details. One of my own patients, a brilliant clinical psychologist, reverted to and lived in a detailed puppet's world whenever reality darkened; and another, a physician, wrote many love poems to an imaginary sweetheart he had 'known' from childhood. Nonetheless, the specific parallelism between the life and fantasies of 'Kirk Allen' and Austin Tappan Wright appear to be a little too close for interpretative comfort.

Assuming that the resemblances between the imaginary worlds and writings of 'Kirk Allen' and Austin Wright are not merely coincidental, it is relatively easy to reconstruct, as Boring (*Amer. Sci.*, 1954, 42, 639-645) has done in connection with a case of a plagiarized poem, what may have happened in the case of Lindner's writing *The Jet-Propelled Couch*. Quite probably, he had a patient with unusual fantasies and, not wishing to identify him too closely, 'dreamed up' a substitute case instead. In so doing, he could unconsciously have called to mind the facts about Austin Wright and *Islandia* which he had read and 'forgotten' about years previously and presented and dramatized these facts in his 'case history.' That Lindner did not consciously plagiarize can almost certainly be deduced from the fact that the risk of discovery would have been too great, since *Islandia* sold well in its day and presumably is still being read.

In any event, it would appear that unconscious plagiarism may occur not only in poems, stories, and other writings but in published 'case histories' as well. This is hardly surprising, for psychologists, as Boring again has shown, share with other human beings egoistic emotions and unconscious biases. I think, however, that it is high time to call the attention of psychological readers, and especially of CP reviewers, to the fact that some of what are published as 'true' psychotherapeutic tales are to be highly questioned, challenged, and taken with a huge bucket of salt. Otherwise, 'proof' by fiction will tend to replace the use of experimental and clinical data for evidence.

ALBERT ELLIS  
New York City



*There is more ado to interpret interpretations than to interpret the things, and more books upon books than upon all other subjects; we do nothing but comment upon one another.*

—M. E. DE MONTAIGNE

## BOOKS RECEIVED

- ATKINSON, J. W. (Ed.). *Motives in fantasy, action, and society: a method of assessment and study*. Princeton, N. J.: D. Van Nostrand, 1958. Pp. xv + 873. \$9.75.
- AUSUBEL, D. P. *Drug addiction: physiological, psychological, and sociological aspects*. New York: Random House, 1958. Pp. 126. \$9.50.
- BARTLETT, SIR FREDERIC. *Thinking: an experimental and social study*. New York: Basic Books, 1958. Pp. 203. \$4.00.
- BERGLER, EDMUND. *Counterfeit-sex: homosexuality, impotence, frigidity*. (2nd ed.) New York: Grune & Stratton, 1958. Pp. xvii + 380. \$6.50.
- BOSS, MEDARD. *The analysis of dreams*. (Trans. by A. J. Pomerans.) New York: Philosophical Library, 1958. Pp. 223. \$6.00.
- BROWN, C. C., & R. T. SAUCER. *Electronic instrumentation for the behavioral sciences*. (American Lecture Series, No. 320.) Springfield, Ill.: Charles C Thomas, 1958. Pp. xiv + 160. \$5.50.
- BROWN, HARCOURT (Ed.). *Science and the creative spirit: essays on humanistic aspects of science*. Toronto: University of Toronto Press, 1958. Pp. xxviii + 165. \$4.50.
- BROWN, HARRISON. *Problems of survival*. (Gideon Seymour Memorial Lecture Series.) Minneapolis: University of Minnesota, 1958. Pp. 23.
- CAUDILL, WILLIAM. *Effects of social and cultural systems in reactions to stress*. (Social Science Research Council Pamphlet No. 14.) New York: Social Science Research Council, 1958. Pp. v + 34.
- CORNER, G. W. *Anatomist at large*. New York: Basic Books, 1958. Pp. v + 215. \$4.00.
- DANZIG, E. R., P. W. THAYER, & LILA R. GALANTER. *The effects of a threatening rumor on a disaster-stricken community*. (Disaster Study No. 10; Publication 517.) Washington, D. C.: Disaster Research Group, National Academy of Sciences-National Research Council, 1958. Pp. xi + 116. \$2.00.
- DULANY, D. E., JR., R. L. DEVALOIS, D. C. BEARDSLEE, & MARIAN R. WINTERBOTTOM (Eds.). *Contributions to modern psychology: selected readings in general psychology*. New York: Oxford University Press, 1958. Pp. x + 398.
- FESSARD, M.-A., H. GASTAUT, A.-N. LÉONTIEV, G. DE MONTPPELLIER, & H. PIÉRON. *Le conditionnement et l'apprentissage: symposium de l'association de psychologie scientifique de langue française*, Strasbourg, 1956. Paris: Presses Universitaires de France, 1958. Pp. 216. 1200 fr.
- FRANK, WALDO. *The rediscovery of man: a memoir and a methodology of modern life*. New York: George Braziller, 1958. Pp. xix + 491. \$6.95.
- GALDSTON, IAGO (Ed.). *Panic and morale*. (Conference Transactions, New York Academy of Medicine & Josiah Macy Jr. Foundation.) New York: International Universities Press, 1958. Pp. xx + 340. \$5.00.
- GARRETT, H. E. *Statistics in psychology and education*. (5th ed.) New York: Longmans, Green, 1958. Pp. xii + 478. \$5.50.
- GORMAN, MOTHER MARGARET. *The educational implications of the theory of meaning and symbolism of general semantics*. Washington, D. C.: Catholic University of America Press, 1958. Pp. xi + 195. \$2.25.
- HARPER, R. S. *Introductory psychology*. Boston: Allyn and Bacon, 1958. Pp. xiv + 389. \$5.75.
- HARRELL, T. W. *Industrial psychology*. (Rev. ed.) New York: Rinehart, 1958. Pp. xiv + 398. \$6.00.
- HARRELL, T. W., & J. T. RUSMORE. *A casebook in industrial and personnel psychology*. New York: Rinehart, 1958. Pp. v + 89. \$1.50.
- HEIDER, FRITZ. *The psychology of interpersonal relations*. New York: John Wiley & Sons, 1958. Pp. ix + 322. \$6.25.
- HOOK, SIDNEY (Ed.). *Determinism and freedom in the age of modern science: a philosophical symposium*. New York: New York University Press, 1958. Pp. xv + 237. \$5.00.
- HUGHES, E. C., HELEN MACGILL HUGHES, & IRWIN DEUTSCHER. *Twenty thousand nurses tell their story*. Philadelphia: J. B. Lippincott, 1958. Pp. xi + 280. \$5.75.
- LAWSON, C. A. *Language, thought, and the human mind*. East Lansing: Michigan State University Press, 1958. Pp. vi + 117. \$4.50.
- LOCKERBY, FLORENCE K. *Communication for nurses*. St. Louis: C. V. Mosby, 1958. Pp. 175. \$3.75.
- MACCOBY, ELEANOR E., T. M. NEWCOMB, & E. L. HARTLEY (Eds.). *Readings in social psychology*. (3rd ed.) New York: Henry Holt, 1958. Pp. xi + 674. \$6.75.
- MASSERMAN, J. H., & J. L. MORENO (Eds.). *Progress in psychotherapy*. Vol. III: *Techniques of psychotherapy*. New York: Grune & Stratton, 1958. Pp. x + 324. \$8.50.
- MAY, ROLLO, ERNEST ANGEL, & H. F. ELLENBERGER (Eds.). *Existence: a new dimension in psychiatry and psychology*. New York: Basic Books, 1958. Pp. x + 445. \$7.50.
- MCCLELLAND, D. C., A. L. BALDWIN, URIE BRONFENBRENNER, & F. L. STROOTBECK. *Talent and society: new perspectives in the identification of talent*. Princeton, N. J.: D. Van Nostrand, 1958. Pp. vii + 275. \$3.75.
- MELNIK, CONSTANTIN, & NATHAN LEITES. *The house without windows: France selects a president*. (Trans. from the French by Ralph Manheim.) Evanston, Ill.: Row, Peterson, 1958. Pp. 358. \$6.25.
- MENNINGER, KARL. *Theory of psychoanalytic technique*. (Menninger Clinic Monograph Series, No. 12.) New York: Basic Books, 1958. Pp. xiii + 206. \$4.75.
- MICKEL, JOSEPH. *Human communication and general semantics*. New York: New Voices Publishing Co., 1958. Pp. 102. \$2.00.
- MOORE, H. E. *Tornadoes over Texas: a study of Waco and San Angelo in disaster*. Austin: University of Texas Press, 1958. Pp. xxiii + 334. \$5.00.
- REY, ANDRÉ. *L'examen clinique en psychologie*. Paris: Presses Universitaires de France, 1958. Pp. 222. 660 fr.
- ROUCEK, J. S. (Ed.). *Juvenile delinquency*. New York: Philosophical Library, 1958. Pp. 370. \$10.00.
- SENDERS, VIRGINIA L. *Measurement and statistics: a basic text emphasizing behavioral science applications*. New York: Oxford University Press, 1958. Pp. xvi + 594. \$6.00.
- SEWARD, GEORGENE (Ed.). *Clinical studies in culture conflict*. New York: Ronald Press, 1958. Pp. xvii + 598. \$7.00.
- SIMMONS, O. G. *Social status and public health*. (Social Science Research Council Pamphlet No. 13.) New York: Social Science Research Council, 1958. Pp. iv + 34. \$5.00.
- STECKLE, L. C. *The man in management: a manual for managers*. New York: Harper & Brothers, 1958. Pp. x + 144. \$3.00.
- STEPHAN, F. F., & P. J. MCCARTHY. *Sampling opinions: an analysis of survey procedure*. New York: John Wiley & Sons, 1958. Pp. xxi + 451. \$12.00.
- ULLMANN, STEPHEN. *The principles of semantics*. (2nd ed.) New York: Philosophical Library, 1957. Pp. 346. \$10.00.
- WOLFGANG, M. E. *Patterns in criminal homicide*. Philadelphia: University of Pennsylvania, 1958. Pp. xiv + 413.
- ZUCKER, LUISE J. *Ego structure in paranoid schizophrenia: a new method of evaluating projective material*. (American Lecture Series, No. 331.) Springfield, Ill.: Charles C Thomas, 1958. Pp. x + 186.



## CENTURY PSYCHOLOGY SERIES

### Current Studies in Psychology

**By F. Joseph McGuigan and Allen D. Calvin.**

A supplementary book for courses in introductory psychology, this text is designed to acquaint the student with current trends in psychological research. It includes 33 salient experiments from the areas of learning, motivation, development, personality and behavior disorders, and social relationships. Pure rather than applied studies were given a general preference, and the important connection between methods and results is emphasized throughout. Difficult studies have not been avoided when they were

representative of contemporary research, but have been rewritten when necessary to make them more interesting and understandable to the beginning student.

A key suggests the use of this text with the most frequently used introductory psychology texts. Also available with **CURRENT STUDIES IN PSYCHOLOGY** is a book of **TEST QUESTIONS**, which has been designed specifically to accompany the McGuigan and Calvin text.

**226 pages, illustrated, \$2.65.**

### Introduction to Methods in Experimental Psychology

**THIRD EDITION by Miles A. Tinker and Wallace A. Russell.**

Substantially revised with new material, this laboratory manual is designed for a

first course in experimental psychology. Complete in itself, it requires no supplementary text.

**292 pages, illustrated, \$4.50.**

### The Psychology of Human Differences

**SECOND EDITION by Leona E. Tyler.**

Designed for advanced courses in differential psychology, this second edition incorporates the

results of significant research in measurable human differences since World War II.

**562 pages, illustrated, \$6.00.**

### Reading Difficulties: Their Diagnosis and Correction

**By Guy L. Bond and Miles A. Tinker.**

Based on experimental findings and sound classroom procedures, this book is a competent manual for the

teacher and clinician in the detection and correction of reading handicaps.

**486 pages, illustrated, \$5.25.**

### Psychological Research

**By Benton J. Underwood.** For graduate courses, this text is a critical evaluation of contemporary research practices in psychology. Emphasis

is upon increasing the scientific validity of research methods in psychology.

**298 pages, illustrated, \$4.00.**

**APPLETON-CENTURY-CROFTS, INC.**

**35 WEST 32ND ST., NEW YORK 1, NEW YORK**

# BOOKS, "SEPARATES," PAMPHLETS

*Available at*

THE AMERICAN PSYCHOLOGICAL ASSOCIATION, INC.

## Books

*School Psychologists at Mid-Century.* 1955 (reprinted 1958). Pp. 230. \$2.75

*Psychological Aspects of Aging.* 1956. Pp. 323. \$2.00

*Psychology and Mental Health.* 1956. Pp. 154. \$1.75

*America's Psychologists.* 1957. Pp. 247. \$1.00

## "Separates"

*Ethical Standards of Psychologists.* \$1.00

*Psychoanalysis as Seen by Analyzed Psychologists.* \$2.00

*Publication Manual.* \$1.00

*A Glossary of Some Terms Used in the Objective Science of Behavior.* \$1.00

*Technical Recommendations for Achievement Tests.* (Single copy free)

## Pamphlets (single copy free; bulk orders 10¢ each)

*Public Information Guide*

*The Psychologist in Today's Legal World*

*Psychologists in Action*

*State Regulations of Psychologists*

*The New York State Certification Bill for Psychologists*

*Career Opportunities in Psychology*

Order from:

AMERICAN PSYCHOLOGICAL ASSOCIATION

1333 Sixteenth Street, N.W.

Washington 6, D. C.